

**ARKANSAS
STATE HIGHWAY
COMMISSION
PROPOSAL DOCUMENTS OF**

FOR THE CONSTRUCTION OF

STATE JOB NO. C48002

STATE AID CITY JOB (CODE 9971)

HOLLY GROVE OVERLAY (SEL. SECS.) (S)

CITY STREET VARIOUS

IN MONROE COUNTY

Bound herein are the Supplemental Specifications, Special Provisions, Proposal Documents and Schedule of Items applicable to this proposed construction contract.

Applicable to this proposed construction contract, but not bound herein, are the Arkansas State Highway Commission Standard Specifications for Highway Construction, Edition of 2014, and the Construction Plans.



CAUTION TO BIDDERS

Please review Section 102 of the Standard Specifications, 2014 Edition for Bidding Requirements and Conditions. Mistakes or omissions can be costly. Important items for you to check are included in, but not limited to, those listed below. This checklist is furnished only to assist you in submitting a proper bid. Check as you read.

- ☐ Have you acknowledged all Addenda by email or fax?
- ☐ Is the unit price entered appropriate for the item?
- ☐ Have you entered a unit price for each bid item except in the case of authorized alternate pay items? (A zero bid (\$0.00) is a valid price and will be considered.)
- ☐ Have you checked the Schedule of Items for various pay items that may have a minimum or maximum unit bid price? (Refer to the Standard Specifications for further information concerning these items)
 - ✓ Asphalt Binder
 - ✓ Relocating Precast Concrete Barrier
 - ✓ Water
 - ✓ Mobilization
- ☐ Have you limited your bid for Mobilization to five percent (5%) of the subtotal?
- ☐ For Federal-aid projects, did you complete the Certification for Federal aid Contracts?
- ☐ Prior to submitting your bid, did you check for error messages, and are all the folders "green"?
- ☐ If submitting a paper copy of the Proposal Guaranty (Bid Bond) is it signed by an officer of your company **AND** the Surety Agent?
- ☐ Did you ensure your Proposal Guaranty (if you are submitting a paper bond) will arrive prior to the time and date stated on Page 2 of the Proposal Documents?

1-17-08

Revised: 6-1-09

Revised: 2-15-12

Revised: 1-15-15

Revised: 5-26-16

Revised: 11-17-17

ARKANSAS DEPARTMENT OF TRANSPORTATION

NOTICE OF NONDISCRIMINATION

The Arkansas Department of Transportation (Department) complies with all civil rights provisions of federal statutes and related authorities that prohibit discrimination in programs and activities receiving federal financial assistance. Therefore, the Department does not discriminate on the basis of race, sex, color, age, national origin, religion (not applicable as a protected group under the Federal Motor Carrier Safety Administration Title VI Program), disability, Limited English Proficiency (LEP), or low-income status in the admission, access to and treatment in the Department's programs and activities, as well as the Department's hiring or employment practices. Complaints of alleged discrimination and inquiries regarding the Department's nondiscrimination policies may be directed to Joanna P. McFadden Section Head – EEO/DBE (ADA/504/Title VI Coordinator), P. O. Box 2261, Little Rock, AR 72203, (501)569- 2298, (Voice/TTY 711), or the following email address: joanna.mcfadden@ardot.gov

Free language assistance for Limited English Proficient individuals is available upon request.

This notice is available from the ADA/504/Title VI Coordinator in large print, on audiotape and in Braille.

Arkansas Department of Transportation
Supplemental Specifications and Special Provisions Listing
State Job Number C48002

The following supplemental specifications and special provisions for this project supplement the standard specifications, edition of 2014. In case of conflict, the supplemental specifications and special provisions shall govern.

ERRATA	ERRATA FOR THE BOOK OF STANDARD SPECIFICATIONS
JOB SP	BIDDING REQUIREMENTS AND CONDITIONS
JOB SP	SETTLEMENT AGREEMENTS
JOB SP	MANDATORY ELECTRONIC CONTRACT
JOB SP	MANDATORY ELECTRONIC DOCUMENT SUBMITTAL
JOB SP	ADJUSTMENT OF QUANTITIES FOR STATE-AID STREET PROJECTS
JOB SP	FLEXIBLE BEGINNING OF WORK (PAVEMENT PRESERVATION, CITY AID, AND STATE AID PROJECTS)
JOB SP	SUBMISSION OF ASPHALT CONCRETE HOT MIX ACCEPTANCE TEST RESULTS
JOB SP	BROADBAND INTERNET SERVICE FOR ASPHALT CONCRETE PLANT
JOB SP	WARM MIX ASPHALT
JOB SP	DENSITIES FOR ACHM SURFACE COURSE
JOB SP	RECYCLED ASPHALT SHINGLES
JOB SP	PLASTIC PIPE
SP 108-1	LIQUIDATED DAMAGES
SS 100-3	CONTRACTOR'S LICENSE
SS 100-4	DEPARTMENT NAME CHANGE
SS 102-2	ISSUANCE OF PROPOSALS
SS 108-2	WORK ALLOWED PRIOR TO ISSUANCE OF WORK ORDER
SS 306-1	QUALITY CONTROL AND ACCEPTANCE
SS 400-1	TACK COATS
SS 400-4	DESIGN AND QUALITY CONTROL OF ASPHALT MIXTURES
SS 400-5	PERCENT AIR VOIDS FOR ACHM MIX DESIGNS
SS 400-6	LIQUID ANTI-STRIP ADDITIVE
SS 410-1	CONSTRUCTION REQUIREMENTS AND ACCEPTANCE OF ASPHALT CONCRETE PLANT MIX COURSES
SS 410-2	DEVICES FOR MEASURING DENSITY FOR ROLLING PATTERNS
SS 604-1	RETROREFLECTIVE SHEETING FOR TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
SS 606-1	PIPE CULVERTS FOR SIDE DRAINS

ARKANSAS DEPARTMENT OF TRANSPORTATION

SUPPLEMENTAL SPECIFICATION

ERRATA FOR THE BOOK OF STANDARD SPECIFICATIONS

Errors noted in the printed book of Standard Specifications for Highway Construction, Edition of 2014, are listed below and this publication is hereby revised as follows:

- Page 124: The third sentence of the first paragraph of Subsection 110.03(c) should read: The Engineer will make a decision within 10 business days concerning the necessity or practicability of the request.
- Page 195: The sixth paragraph of subsection 303.02 should read: For Classes 1 through 8 materials, the fraction passing the #200 (0.075 mm) sieve shall not be greater than three-fourths of the fraction passing the #40 (0.0425 mm) sieve. For Classes 3 through 8, the fraction passing the #40 (0.0425 mm) sieve shall have a liquid limit not greater than 25.
- Page 363: In the second paragraph of Subsection 502.02, the reference to ASTM 775 should be replaced by "ASTM A 775".
- Page 636: In the second paragraph of Subsection 730.02, the references to AASHTO M 183 should be replaced with ASTM A36.
- Page 637: The last sentence of the second paragraph of Subsection 730.03 should read: All bolts, nuts, and washers shall be galvanized according to AASHTO M 232 or ASTM B 695, Class 40 or 50.
- Page 767: In the fourth paragraph of Subsection 807.06(a), the reference to ASTM B595 should be replaced by "ASTM B695".
- Page 841: Subsection 817.04(a) should read: The treatment of lumber and timber shall meet the applicable requirements of the current edition of the AWWA, Standards U1, Commodity Specification E, Use Category UC4C.

ARKANSAS DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

JOB NO. C48002

BIDDING REQUIREMENTS AND CONDITIONS

Section 102 of the Standard Specifications for Highway Construction, Edition of 2014, is hereby amended as follows:

The fourth sentence of the second paragraph of **Subsection 102.01** is hereby deleted, and the following substituted therefore:

Prospective bidders may file a questionnaire at any time; however, prospective bidders will not be given authorization to submit a proposal unless a rating has been extended based on an acceptable questionnaire.

The last paragraph of **Subsection 102.01** is hereby deleted.

The second sentence of **Subsection 102.02** is hereby deleted, and the following substituted therefore:

The Notice to Contractors will contain a description of the proposed work, and information regarding access to proposal documents, plans, specifications, and the amount and nature of the proposal guaranty.

Subsection 102.03 is hereby deleted, renamed **Contents of Proposal Documents**, and the following substituted therefore:

The proposal documents will state the location and description of the contemplated construction and will show the estimate of the various quantities and kinds of work to be performed or materials to be furnished, and will have a schedule of items. The proposal documents will state the time in which the work must be completed, the amount of the proposal guaranty, and the date and time of the letting of work. The documents will also include any special provisions or requirements that vary from or are not contained in the standard specifications.

All forms included in the proposal documents are considered a part thereof. The plans, specifications, and other documents designated in the proposal documents will be considered a part of the proposal whether included or not.

The first through fourth paragraphs of **Subsection 102.04** are hereby deleted, and the following substituted therefore:

To become an eligible bidder, prospective bidders must be registered to bid in Arkansas with Bid Express. Prospective bidders must also contact the Program Management Division at (501) 569-2261 during regular business hours between the date the project is advertised and 4:30 p.m. on the day prior to the scheduled bid opening to request to become eligible to bid specific projects. Only prequalified contractors or their authorized representative may request to become an eligible bidder.

ARKANSAS DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

JOB NO. C48002

BIDDING REQUIREMENTS AND CONDITIONS

If the prospective bidder's prequalification rating is not "unlimited", the bidder shall file a certification with the Department citing all contracts in force and the unfinished value of such work. A prospective bidder will not be allowed to submit a proposal until a certification for the current bidding period is on file and the amount of work the contractor may be allowed to undertake is determined. The contractor's prequalification rating, less the unfinished value of all contracts in force, will determine the amount of additional work that the contractor may be allowed to undertake. A contractor will not be allowed to submit a proposal on an individual project for which the estimated cost is more than the amount that the contractor may be allowed to undertake, but the contractor will be allowed to submit a proposal on more than one project, providing that the estimated cost of each project is not more than the amount that the contractor may be allowed to undertake. In the event a contractor submits a low bid on more than one project and the aggregate amount is greater than the amount the contractor may be allowed to undertake, the Commission will exercise its discretion in the award of a particular project or projects.

A charge will be assessed for authorization to submit a proposal, paper copies of the proposal documents, and plans issued. These services are provided during regular business hours until 4:30 p.m. on the day prior to the scheduled bid opening at the Arkansas Department of Transportation, 10324 Interstate 30, Little Rock, Arkansas 72209, (501) 569-2261. Payment shall be made at the time services are provided or upon receipt of statement therefore. No refund will be allowed for bids not submitted or for plans or proposal documents returned.

The second sentence of the first paragraph of **Subsection 102.06** is hereby deleted, and the following substituted therefore:

The bidder is expected to examine carefully the site of the proposed work, the proposal documents, plans, specifications, supplemental specifications, and special provisions before submitting a proposal.

The first paragraph of **Subsection 102.07** is hereby deleted, and the following substituted therefore:

The proposal shall only be submitted through the internet bidding service, Bid Express. The bidder shall specify a unit price in figures for each pay item for which a quantity is given. A unit price of "zero" (\$0.00) is a valid price and will be considered. A blank unit price is not considered valid. The unit bid price should not be carried beyond 1 cent (\$0.01). Any figures on the unit bid price beyond 1 cent will be dropped.

The second and third paragraphs of **Subsection 102.07** are hereby deleted.

ARKANSAS DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

JOB NO. C48002

BIDDING REQUIREMENTS AND CONDITIONS

The fifth paragraph of **Subsection 102.07** is hereby deleted, and the following substituted therefore:

The bidder's proposal must be submitted with a digital signature containing the name of the individual, one or more members of the partnership, one or more members or officers of each firm representing a joint venture, or one or more officers of a corporation, or by an agent of the Contractor legally qualified and acceptable to the Department.

The sixth paragraph of **Subsection 102.07** is hereby deleted, and the following substituted therefore:

If the proposal is submitted with a digital signature of any person who is not listed in the bidder's Prequalification Questionnaire (Questionnaire Form) as the individual, as a partner of a partnership, or as an officer of a corporation, authorization for such submittal should be on file with the Department prior to the download of bids. This authorization shall be made before the downloading of bids and be in the form of a Power of Attorney duly executed and signed by an official with power to constitute such authority.

The last sentence of the seventh paragraph of **Subsection 102.07** is hereby deleted, and the following substituted therefore:

Those items of Asphalt Binder that are subject to a minimum bid price will bear the note "(Minimum bid price is \$120.00 per ton)" within the Schedule of Items of the proposal documents.

The first sentence of the ninth paragraph of **Subsection 102.07** is hereby deleted, and the following substituted therefore:

The proposal documents for all federal aid projects will contain a bidders list.

The last sentence of the ninth paragraph of **Subsection 102.07** is hereby deleted, and the following substituted therefore:

The information provided will not be used for contract awarding purposes but must be provided before the Contractor will be given authorization to submit proposals for future lettings.

Subsection 102.08 Irregular Proposals is hereby deleted, and the following substituted therefore:

(a) Proposals will be considered irregular and will be rejected for the following reasons:

- (1) If the proposal does not contain a unit price for each pay item listed except in the case of authorized alternate pay items.
- (2) If the proposal is not digitally signed by an authorized representative of the firm.

ARKANSAS DEPARTMENT OF TRANSPORTATION

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BIDDING REQUIREMENTS AND CONDITIONS

- (3) If the proposal is not accompanied by the proper proposal guaranty.
- (4) If a proposal is received from an individual, firm, partnership, or corporation with an interest, as principal, in another proposal for the same project.
- (5) If the proposal is not accompanied by the Certification to Submit DBE Participation.
- (b) Proposals will be considered irregular and may be rejected for the following reasons:
 - (1) If the proposal is not accompanied by a bid schedule and bid schedule narrative as required in the proposal documents.
 - (2) Unbalanced proposals in which the prices for some items are out of proportion to the reasonable costs representative of those items.
 - (3) If there are irregularities of any kind that may tend to make the proposal incomplete, indefinite, or ambiguous as to its meaning.

The first sentence of **Subsection 102.09** is hereby deleted and the following substituted therefore:

No proposal will be considered by the Commission unless a guaranty in the form of a bank draft, certified check, or cashier's check drawn on a solvent bank or trust company, or a bidder's paper bond executed by an approved surety company has been received by the Program Management Division prior to the download of bids.

The following paragraph is hereby added after the first paragraph of **Subsection 102.09**:

Electronic bid bonds are allowed. The prospective bidder should verify their bid bond in their proposal prior to submission.

Subsection 102.10 is hereby deleted and the following substituted therefore:

The proposal shall only be submitted through the internet bidding service, Bid Express.

Subsection 102.11 is hereby deleted, and the following substituted therefore:

A bidder may withdraw or modify a proposal after it has been submitted to Bid Express, up to the time set for the deadline for proposals to be received. A proposal may also be withdrawn if the Commission fails to make an award within 40 calendar days after the date of downloading.

ARKANSAS DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

JOB NO. C48002

BIDDING REQUIREMENTS AND CONDITIONS

Subsection 102.12 is hereby deleted, renamed **Downloading of Proposals**, and the following substituted therefore:

Proposals will be downloaded and then posted on the Department's website at the time and place indicated in the Notice to Contractors.

The last sentence of **Subsection 102.15** is hereby deleted, and the following substituted therefore:

In any case, the prospective bidders will be contacted prior to the download of bids.

ARKANSAS DEPARTMENT OF TRANSPORTATION

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JOB NO. C48002

SETTLEMENT AGREEMENTS

Any firm, partnership, or corporation that has a common officer, owner, or partner with any contractor that is a party to a settlement agreement with the Department is bound by the terms of the contractor's settlement agreement.

ARKANSAS DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

JOB NO. C48002

MANDATORY ELECTRONIC CONTRACT

Paper Contract Documents and Forms will not be accepted.

The Department will only accept and execute an electronic contract for this project through Doc Express, a paperless contracting system. Prospective bidders will need to contact Doc Express to set up an account prior to the bid opening date. The toll-free phone number for Doc Express is 1-888-352-2439 and their website address is www.docexpress.com.

Section 103 of the Standard Specifications for Highway Construction, Edition of 2014, is hereby amended as follows.

The first sentence of **Subsection 103.06(a)** is hereby deleted, and the following substituted therefore:

The Contract shall be electronically signed by the successful bidder and electronically submitted to the Program Management Division, Construction Contract Procurement Section, together with the required bonds and proof of liability insurance, within 10 business days after the notice of award has been issued.

Subsection 103.08(d)(3)d. is hereby deleted, and the following substituted therefore:

Documentation of the bidder's commitment to use a DBE subcontractor whose participation it submits to meet a contract goal; and

Subsection 103.08(d)(3)e. is hereby deleted, and the following substituted therefore:

Document confirmation from the DBE that it is participating in the contract as provided in the Contractor's commitment.

Subsection 103.08(d)(5) is hereby deleted, and the following substituted therefore:

The preceding information shall be submitted directly to the Arkansas Department of Transportation, Program Management Division, via Doc Express.

ARKANSAS DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

JOB NO. C48002

MANDATORY ELECTRONIC DOCUMENT SUBMITTAL

Paper Document Submittals will not be accepted.

The Department will only accept electronically-submitted documents for consideration on this project. All correspondence and submittals to the Department shall be submitted through Doc Express, a paperless contracting system. When signed originals are required, the original shall be the document uploaded to Doc Express and the signature shall be the electronic signature applied through Doc Express. The Contractor shall use the same organizational account for project documentation as used to fulfill the requirements of the Mandatory Electronic Contract Special Provision. The toll-free phone number for Doc Express is 1-888-352-2439 and their website address is www.docexpress.com.

Any reference in the Standard Specifications to document submittal in writing or by U.S. Mail, facsimile, or in person is hereby amended to require that such documents be submitted using Doc Express with the following exceptions:

- Material delivery tickets which are used for payment or for field verification shall be submitted on paper as required by the Standard Specifications for Highway Construction, Edition of 2014.
- Any document with specific submittal requirements in state and/or federal law or federal regulations that conflict with the requirements of this Special Provision shall be submitted in accordance with such state and/or federal law or federal regulations.

A user guide is available on the Department's web page to assist Contractors with the use of Doc Express. The "Contractor Guide to Using Doc Express" is available on the Department's web page at this link:

http://ardot.gov/construction_division/Contractor_Guide_DocExpress.pdf.

The Contractor may provide access for subcontractors to view and submit items in Doc Express by following the instructions provided in the "Contractor Guide to Using Doc Express". Once an organizational account is activated and the Contractor provides access to the contract, a subcontractor may submit documents to the Contractor in Doc Express by uploading the electronic documents as directed in the User Guide. Any documents uploaded by the subcontractor must be then retrieved and published by the Contractor within Doc Express for further action by the Engineer. The Engineer will not review or take any actions on any documents submitted by the subcontractor until the document has been appropriately submitted by the Contractor.

Any submittals, documents, subcontracts, proposals, working drawings, or any other items submitted by the Contractor within Doc Express are not considered approved by the Engineer until written notification of the approval is published by the Engineer in the "CON-Correspondence-From Department to Contractor" drawer in Doc Express. Any action taken by the Contractor prior to this notification is taken at the Contractor's own risk.

The Department's System Administration team has no authority to take action on any documents submitted to the system. Access for this team is for management of the application only. Knowledge of any document submitted is not imputed to the Department by the knowledge of Systems Administration.

The requirements of this Special Provision shall supersede the requirements of all other Special Provisions unless such Special Provision includes a stated exception to this Special Provision.

ARKANSAS DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

JOB NO. C48002

ADJUSTMENT OF QUANTITIES FOR STATE-AID STREET PROJECTS

Section 104 of the Standard Specifications for Highways Construction, Edition of 2014, is hereby amended as follows:

The following is added as the last paragraph of **Subsection 104.02**:

On State-Aid Street Projects, funding amounts are limited for each city. The Commission reserves the right to increase or decrease the quantities on a project at the time of the award in order to utilize all funds that are available or to ensure that funds are available to pay for the work performed. For projects which include more than one city, each city may have a different funding limit. On those projects the Commission reserves the right to increase or decrease the quantities placed within each city in order to utilize all funds that are available or to ensure that funds are available to pay for the work performed. The Contractor shall perform the work as increased or decreased in each city and no allowance will be made for anticipated profits on increases or decreases so incurred.

ARKANSAS DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

JOB NO. C42008

**FLEXIBLE BEGINNING OF WORK
(PAVEMENT PRESERVATION, CITY AID, AND STATE AID PROJECTS)**

Section 108, Prosecution and Progress, of the Standard Specifications for Highway Construction, Edition of 2014, is hereby amended as follows:

Subsection 108.02 (b) Work Order.

(2) The last bullet stating "Erection of advance warning signs." is hereby deleted and the following substituted therefor:

- The Contractor may elect to erect advance warning signs for their convenience after the issuance of the work order but prior to the date that work will begin, provided that:
 - i. The signs are covered and kept properly covered until the work begins. Failure to cover the signs after initial installation will constitute the Contractor's intent to begin work and time charges will be assessed starting that date. The sign covering shall cover the face completely and prevent the message from being read during both day and night conditions and shall not damage the sheeting face. The covering materials shall be heavy duty, opaque and either dark green, brown, or black in color.
 - ii. No progress payments will be made for the Signs or Mobilization until after the work begins (for the purpose of this special provision, beginning of work is defined as the beginning of contract work other than the installation of signs and other traffic control devices, such as paving operations, shoulder construction operations, cold milling, etc.)

(4) **b. Working Day Contract.** is hereby deleted and the following substituted:

b. Working Day Contract. Unless the Contractor is otherwise advised in writing, the Work Order for a working day contract shall become effective on the fifteenth calendar day following the execution of the Contract by the Department. Should the effective date fall on Saturday, Sunday, a legal holiday designated in Subsection 101.01(c), Monday following a holiday on Sunday, or Friday preceding a holiday on Saturday, the effective date shall be the next work day. The written Work Order from the Engineer will follow with the effective date being as specified. The assessment of contract time, according to Subsection 108.06, will commence when the Contractor begins work or on September 16, 2019 if the Contractor has not commenced work. The Contractor will submit written notification to the Engineer five days prior to commencing work.

(4) **Subsection 108.02(c)** is hereby deleted.

ARKANSAS DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

JOB NO. C48002

SUBMISSION OF ASPHALT CONCRETE HOT MIX ACCEPTANCE TEST RESULTS

Division 106 of the Standard Specifications for Highway Construction, Edition of 2014, is hereby amended as follows:

The following is hereby added to **Subsection 106.04, Acceptance of Materials**:

All ACHM Contractor Acceptance Tests shall be submitted electronically by use of the ACHM Microsoft Excel Spreadsheet for Contractors/Suppliers and on paper.

The ACHM Microsoft Excel Spreadsheet for Contractors/Suppliers can be downloaded from the following website: http://www.ardot.gov/contracts/contractor_information/contractor.aspx.

To download this file and the supporting documentation, click on the link labeled Contractor_ACHM.exe which is listed under User Help File and Utilities on the website noted above.

Use of this file requires Microsoft Excel 2000, 2003, or 2007.

The preferred method of transmitting the file is to e-mail the completed ACHM Microsoft Excel Spreadsheet for Contractors/Suppliers to the Department's ACHM Plant Inspector assigned to the project. It is also acceptable to transmit the file by Compact Disk (CD) or other electronic device. Regardless of the method of transmission used, the signed paper acceptance tests must be provided to the Resident Engineer.

Any questions or issues arising from the use of this file should be referred to the Resident Engineer.

ARKANSAS DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

JOB NO. C48002

BROADBAND INTERNET SERVICE FOR ASPHALT CONCRETE PLANT

Section 409.03(h) of the Standard Specifications for Highway Construction, Edition of 2014, is hereby amended as follows:

The following bullet is added under detailed requirements:

- Broadband Internet Service shall be provided.

The Broadband Internet Service shall be provided with an Internet Protocol (IP) address which is reachable on the global Internet (public) and which is permanently assigned (static). The Contractor is not required to provide this service if an IP address which is both static and public is not available.

If this service is not available at the beginning of a project but becomes available during the life of the project, the Contractor shall provide the service immediately from the date of availability.

The data transfer rate shall be 3 megabits per second (Mbps) download and 500 kilobits per second (kbps) upload, or higher, with latency not to exceed 150 milliseconds. If the Broadband Internet Service meets all of the requirements of this specification except for the data transfer rate and/or latency, then the best performing available connection shall be provided.

Prior to the selection of the Broadband Internet Service provider, the Contractor shall submit to the Resident Engineer, in writing, the proposed method for providing Broadband Internet Service. The Resident Engineer shall review this submittal and respond in writing regarding the acceptability of the proposed method.

The Broadband Internet Service shall be provided with equipment providing one Ethernet port.

ARKANSAS DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

JOB NO. C48002

WARM MIX ASPHALT

DESCRIPTION: The Department will allow the use of Warm Mix Asphalt (WMA). All provisions for the production and placement of conventional HMA mixtures as stipulated in Section 410 Construction Requirements and Acceptance of Asphalt Concrete Plant Mix Courses of the Standard Specifications for Highway Construction, Edition 2014, are applicable except as noted below.

Section 410 Construction Requirements and Acceptance of Asphalt Concrete Plant Mix Courses of the Standard Specifications for Highway Construction, Edition of 2014, is hereby amended as follows:

Section 410.03: Replace the third sentence with "WMA production temperatures at the plant shall be according to the Contractor's approved mix design but may be adjusted based on recommendations of the WMA additive/process manufacturer."

Add the following paragraph: "Implementation of best management practices in the control of aggregate moisture content prior to introduction to the drying or mixing drum is highly recommended in order to achieve the maximum benefit of WMA technology."

Section 410.07: Replace the last sentence of the first paragraph with "Spreading and finishing temperatures shall be according to the Contractor's approved mix design, but in no case shall the WMA be placed at a temperature less than 220° F."

ARKANSAS DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

JOB NO. C48002

DENSITIES FOR ACHM SURFACE COURSE

Division 400 of the Standard Specifications for Highway Construction, Edition of 2014, is hereby amended as follows:

The following is hereby added as the second paragraph of **Subsection 407.04, Construction Requirements and Acceptance**:

On city street projects, the Engineer may reduce the required minimum density of the ACHM Surface Course to 90% of the maximum theoretical density based on actual field conditions which would either prevent obtaining 92.0% of the maximum theoretical density or when damage to underlying utilities and/or subgrade is imminent. However, no reduction from the specified density of 92.0% will be permitted on ACHM placed on a subgrade, an underlying base course, or layers of ACHM constructed by the Contractor under this same contract.

ARKANSAS DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

JOB NO. C48002

RECYCLED ASPHALT SHINGLES

DESCRIPTION: This specification covers the use of Recycled Asphalt Shingles (RAS) in Asphalt Concrete Hot Mix (ACHM).

MATERIALS: ACHM utilizing RAS shall meet all of the requirements of Sections 404, 409, 410, and 416 and the requirements of Section 405, 406, or 407 for the mixture type specified on the plans. The mix design will follow AASHTO MP 23-14 and AASHTO PP 78-14 except as follows:

- (1) A maximum of three (3) percent RAS by total mix weight will be allowed in any mix design. The amount of RAS will be included in the total Recycled Asphalt Pavement (RAP) percentage if RAP is used.
- (2) Shingle material shall be processed so that 100 percent passes the 3/8" (9.5 mm) sieve and ninety-five (95) percent passes the No. 4 (4.75 mm) sieve.
- (3) Pre-consumer, or manufacturer waste, shingles may be used in mix designs requiring PG 64-22 binder only.
- (4) Post-consumer, or tear-off, shingles may be used in mix designs requiring PG 64-22 binder only.
- (5) Pre- and post-consumer shingles may not be combined in mix designs.
- (6) Tear-off shingles shall be acquired from residential sources only and shall have been produced after 1980. In no case shall a roofing material containing rubber or rubber-like polymer components be used as RAS in asphalt mixes.
- (7) When using tear-off shingles, one stockpile test per lot of mix shall be conducted to confirm the binder content and gradation of the RAS product, and the sample shall be representative of the RAS material entering the production process for the lot tested. Binder content and gradation shall be determined using ARDOT 450 or AASHTO T 308. If AASHTO T 308 is used, the sample size shall be 400 grams, and the sample shall be oven dried to a constant mass (at a temperature not exceeding 140°F) prior to testing. Shingle fibers shall be removed from the extracted sample prior to gradation testing.

ARKANSAS DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

JOB NO. C48002

PLASTIC PIPE

Section 606 Pipe Culverts of the Standard Specifications for Highway Construction, Edition of 2014, is hereby expanded to include the following:

Subsection 606.02(d)(1) is hereby deleted and the following is substituted therefore:

(1) Polyethylene Pipe. The manufacture and furnishing of high density polyethylene pipe ranging in diameter from 18" (450mm) minimum to 48" (1200mm) maximum shall be according to AASHTO M 294, Type S. Polyethylene pipe shall have a corrugated outer shell with an essentially smooth wall waterway. Couplings and fittings supplied or recommended by the pipe manufacturer shall be used.

Subsection 606.02(d)(2) is hereby deleted and the following is substituted therefore:

(2) PVC Pipe. The manufacture and furnishing of PVC pipe ranging in diameter from 18" (450mm) minimum to 36" (900mm) maximum shall be according to ASTM F949, Cell Classification 12454. PVC pipe shall have annular or helical projections or ribs on the outer surface and an essentially smooth wall waterway. Couplings and fittings supplied or recommended by the pipe manufacturer shall be used.

Subsection 606.02(k) is hereby deleted and the following is substituted therefore:

(k) Structural Bedding and Structural Backfill for Plastic Pipe Culverts shall meet the requirements for the material shown in the Plans and shall meet the requirements as shown in Subsection 302.02 of these Specifications except that the maximum particle size shall be 1" (25.4 mm) for Structural Bedding and 1 ½" (37.5 mm) for Structural Backfill.

Subsection 606.03.(a) second paragraph is hereby deleted and the following is substituted therefore:

Pipe culverts under the roadbed shall be so placed that the minimum depth of cover for pipe of any diameter or type shall be not less than the minimum cover as shown in the Plans, including a minimum of 12" (304.8 mm) of pavement and/or base.

The following is added as Subsection 606.03(h):

(h) Acceptance Testing of Installed Polyethylene and PVC Pipe. All plastic pipes installed for storm drainage systems shall be tested for acceptance by the Contractor using a method consisting of, but not limited to, the following: electronic deflectometers, video cameras, or go/no-go mandrel. These tests shall be conducted not less than 30 days following installation of the pipe. The Engineer will witness all tests.

At least 10 percent of the total quantity of each size of plastic pipe installed for storm drainage on the project shall be inspected for deformations using one of the approved methods listed above. The Engineer may select the areas to be tested. If the test indicates excessive deflection in the selected length of pipe, the Engineer may require additional lengths of pipe be tested in increments of 10 percent of the total installed length. Any pipes with a reduced diameter of 5 percent of the actual inside pipe diameter shall be removed and relayed, if undamaged, or replaced with a new pipe at no cost to the Department. Relayed pipe and new pipe shall be retested at no cost to the Department.

ARKANSAS DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

JOB NO. C48002

PLASTIC PIPE

If the mandrel test is selected, a nine-point mandrel with a diameter equal to 95 percent of the nominal diameter of the pipe shall be used. The mandrel shall be of a shape similar to that of a true circle enabling the gauge to pass through a satisfactory pipeline with little or no resistance and shall be designed to prevent tipping from side to side and to prevent debris build-up from occurring between channels of the adjacent fins or legs. Each end of the mandrel shall have fasteners for attaching pulling cables. The mandrel shall have nine various sized fins or legs of appropriate dimensions for various diameter pipes. Each fin or leg shall have a permanent marking that states its designated pipe size. For acceptance testing, the mandrel must pass through the entire section between manholes or other structures in one pass when pulled by hand without the use of excessive force.

ARKANSAS DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

LIQUIDATED DAMAGES

As specified in the Contract, liquidated damages for this project will be as shown in the following tables:

WORKING DAY PROJECTS

ORIGINAL CONTRACT AMOUNT		RATE
FROM MORE THAN	TO AND INCLUDING	-----
\$ 0	\$ 50,000	\$ 400
50,000	100,000	700
100,000	500,000	800
500,000	1,000,000	1,100
1,000,000	2,000,000	1,300
2,000,000	5,000,000	1,500
5,000,000	10,000,000	1,900
10,000,000	15,000,000	2,000
15,000,000	20,000,000	2,100
20,000,000	-----	2,500

FIXED DATE PROJECTS

ORIGINAL CONTRACT AMOUNT		RATE
FROM MORE THAN	TO AND INCLUDING	-----
\$ 0	\$ 50,000	\$ 90
50,000	100,000	100
100,000	500,000	200
500,000	1,000,000	250
1,000,000	2,000,000	320
2,000,000	5,000,000	400
5,000,000	10,000,000	600
10,000,000	-----	750

ARKANSAS DEPARTMENT OF TRANSPORTATION
SUPPLEMENTAL SPECIFICATION
CONTRACTOR'S LICENSE

Section 102 of the Standard Specifications for Highway Construction, Edition of 2014, is hereby amended as follows:

The third paragraph of **Subsection 102.01, Prequalification of Bidders** is hereby deleted and the following substituted thereof:

The attention of prospective bidders is directed to Ark. Code Ann. §17-25-101 et seq., Act 150 of the 1965 Acts of Arkansas, being an "Act Regulating the Practice of Contracting in the State of Arkansas", and any subsequent amendments made thereto. When the work offered is financed in whole with State funds and is estimated to cost \$50,000 or more, the prospective bidder must show evidence of license with the Contractors Licensing Board for the State of Arkansas before being furnished with a proposal form.

The third paragraph of **Subsection 108.01, Subletting of Contract** is hereby deleted and the following substituted thereof:

It shall be the responsibility of the Contractor to determine that all parties performing work amounting to \$50,000 or more are currently licensed by the Contractors Licensing Board for the State of Arkansas.

ARKANSAS DEPARTMENT OF TRANSPORTATION
SUPPLEMENTAL SPECIFICATION
DEPARTMENT NAME CHANGE

All references to the Arkansas State Highway and Transportation Department contained within the Standard Specifications for Highway Construction (Edition of 2014), the Qualified Products List, the Manual of Field Sampling and Testing Procedures, plan sheets, Supplemental Specifications, and all Special Provisions contained in this proposal are hereby deleted and replaced with the title of Arkansas Department of Transportation.

All references to AHTD contained within the Standard Specifications for Highway Construction (Edition of 2014), the Qualified Products List, the Manual of Field Sampling and Testing Procedures, plan sheets, Supplemental Specifications, and all Special Provisions contained in this proposal are hereby deleted and replaced with the abbreviation ARDOT.

All references to the Arkansas State Highway Commission contained within the Standard Specifications for Highway Construction (Edition of 2014), the Qualified Products List, the Manual of Field Sampling and Testing Procedures, the Standard Drawings, plan sheets, Supplemental Specifications, and all Special Provisions contained in this proposal remain in effect.

ARKANSAS DEPARTMENT OF TRANSPORTATION
SUPPLEMENTAL SPECIFICATION
ISSUANCE OF PROPOSALS

Section 102 of the Standard Specifications for Highway Construction, Edition of 2014, is hereby amended as follows:

Subsection 102.04(j) is hereby deleted and the following is substituted therefore:

(j) If the prospective bidder is the Contractor on a current Contract with the Commission on which Liquidated Damages are being assessed, and there are no pending time extensions warranted to remove the project from Liquidated Damages.

Subsection 102.04(k) is hereby deleted and the following is substituted therefore:

(k) If the prospective bidder has a current Contract in default.

ARKANSAS DEPARTMENT OF TRANSPORTATION
SUPPLEMENTAL SPECIFICATION
WORK ALLOWED PRIOR TO ISSUANCE OF WORK ORDER

Section 108 of the Standard Specifications for Highway Construction, Edition of 2014, is hereby amended as follows:

Subsection 108.02(b)(2) is hereby deleted and the following is substituted therefore:

(2) The delivery to the Department for execution of the Contract and bonds properly executed on behalf of the Contractor and surety and the minimum 72 hours advance notice as required above shall constitute the Contractor's authority to begin the following items of work:

- Mobilization;
- Preparation of shop drawings and other required submissions;
- Ordering, fabrication, assembly, and/or stockpiling of materials;
- Driving Test Piling; and
- Contract surveying, when Roadway and/or Bridge Construction Control is included in the Contract.
- Erection of advance warning signs.
- Installation of netting on structures to prevent nesting of migratory birds in accordance with applicable Special Provisions (if included in the Contract).
- Set up, installation, and testing of Automated Work Zone Information Systems (if included in the Contract).
- Off-site area approval process per Section 107.10(c).

Such advance work shall be subject to the Contractor's assumption of the risk of cancellation of the award and the following:

- The Contractor shall, on commencing such operations, take all precautions required for public safety and shall observe all the provisions in the Contract;
- In the event of cancellation of the award, the Contractor shall at Contractor expense do such work as necessary to leave the site in a neat condition to the satisfaction of the Engineer;
- In the event of cancellation of the award, all work performed shall be deemed to be at the Contractor's expense; and
- All work done under this subsection in accordance with the Contract before its execution by the Commission will, when the Contract is executed, be considered authorized work and will be paid for as provided in the Contract.

Unless otherwise notified in writing, no time will be assessed for work performed prior to the effective date of a Work Order.

No payments will be made prior to the date established by the Engineer under Subsection 109.07, which date will be after the effective date of a Work Order.

The Contractor shall not be entitled to any additional compensation or an extension of time for any delay, hindrance, or interference caused by or attributable to commencement of work before the effective date of a Work Order.

ARKANSAS DEPARTMENT OF TRANSPORTATION

SUPPLEMENTAL SPECIFICATION

QUALITY CONTROL AND ACCEPTANCE

Division 300 of the Standard Specifications for Highway Construction, Edition of 2014, is hereby amended as follows:

The first sentence of the third paragraph **Subsection 306.03 Acceptance Testing** is hereby deleted and the following substituted therefor:

If the material being furnished is crushed stone the Department will furnish the PL, LL, and PI for the material, further tests for PL, LL, and PI are waived.

ARKANSAS DEPARTMENT OF TRANSPORTATION
SUPPLEMENTAL SPECIFICATION
TACK COATS

Division 400 of the Standard Specifications for Highway Construction, Edition of 2014, is hereby amended as follows:

Section 401, Prime and Tack Coats and Emulsified Asphalt in Base Course, is hereby modified as follows:

The first sentence of **Subsection 401.03(a)** is hereby deleted and the following substituted therefore:

The surface to be treated with prime or tack coat shall be cleaned of dust, dirt, and loose or foreign material by sweeping with mechanical brooms immediately preceding the application of the prime or tack coat.

Third sentence of **Subsection 401.03(c)** is hereby deleted and the following is substituted therefore:

No dilution beyond that which is part of the emulsification process is permitted. The tack coat shall not be diluted, cut, or otherwise thinned after receipt from the manufacturer's facility.

The fifth sentence of **Subsection 401.03(c)** is hereby deleted and the following substituted therefore:

The rate of application shall be from 0.03 gallon to 0.10 gallon per square yard (0.1 L/sq m to 0.5 L/sq m) of residual asphalt as designated by the Engineer.

Section 410, Construction Requirements and Acceptance of Asphalt Concrete Plant Mix Courses, is hereby modified as follows:

The sixth paragraph of **Subsection 410.05** is hereby deleted and the following substituted therefore:

For foreign material, or when the time lapse between courses is more than 8 hours, the earlier course shall be cleaned and given a tack coat before placing the succeeding course. When directed, the tack coat shall be applied and paid for under Section 401. If directed by the Engineer, a tack coat shall be used even though the elapsed time has been less than 8 hours.

ARKANSAS DEPARTMENT OF TRANSPORTATION
SUPPLEMENTAL SPECIFICATION
DESIGN AND QUALITY CONTROL OF ASPHALT MIXTURES

Division 400 of the Standard Specifications for Highway Construction, Edition of 2014, is hereby amended as follows:

Section 404, QUALITY CONTROL OF ASPHALT MIXTURES, is hereby modified as follows:

The third paragraph **Subsection 404.04** is hereby deleted and the following substituted therefore:

The accepted mix design shall be field verified by the Contractor at the start of mix production or after an interruption of more than 120 calendar days. The asphalt mixture shall be verified by testing mix that has been produced through the plant using the aggregate proportions shown on the accepted mix design. Production of Department approved mix designs for placement on non-ARDOT projects may be used for mix verification. The Contractor shall notify the Engineer sufficiently in advance for Department personnel to witness all testing of this production and shall provide copies of all test results to the Department.

Section 410, Construction Requirements and Acceptance of Asphalt Concrete Plant Mix Courses is hereby modified as follows:

The first and second sentence of **Subsection 410.09, Acceptance of the Payment and Adjustments in Payment**, is hereby deleted and the following is substituted therefore:

- (a) General. The accepted mix design shall be verified by the Contractor at the start of mix production for that design or after an interruption of more than 120 calendar days. A maximum of 200 tons (200 metric tons) of materials may be placed on the roadway during the verification process.

Section 411, Asphalt Concrete Plant Mix is hereby modified as follows:

The third sentence of Subsection 411.05 (B), Acceptance is hereby amended and the following is substituted therefore:

- (b) Acceptance. The accepted mix design shall be field verified by the Contractor at the start of mix production or after an interruption of more than 120 calendar days.

ARKANSAS DEPARTMENT OF TRANSPORTATION
SUPPLEMENTAL SPECIFICATION
PERCENT AIR VOIDS FOR ACHM MIX DESIGNS

Division 400 of the Standard Specifications for Highway Construction, Edition of 2014, is hereby amended as follows:

The fourth sentence of Paragraph 1 of **Subsection 404.01(b), Design Requirements**, is hereby deleted and the following substituted therefor:

The optimum asphalt content is the asphalt binder content at 4% Air Voids (AV).

The first bullet of Paragraph 1 is hereby deleted and the following substituted therefor:

- PG 64-22 and PG 70-22 mixes will be designed using 4% air voids;

The second sentence of Paragraph 2 of **Subsection 404.04, Quality Control of Asphalt Mixtures**, is hereby deleted and the following substituted therefor:

Adjustments to the accepted mix design to conform to actual production values without re-design of the mixture shall be based on production of the mixture at a target value of 4.0% Air Voids (AV) in specimens and an asphalt binder content not less than that specified in the accepted mix design.

Table 405-1 of **Subsection 405.03 Materials** is hereby deleted and the following substituted therefor:

Table 405-1
Design Requirements for Asphalt Concrete Hot Mix Base Course
(1-1/2" [37.5 mm])

Control Points	
Sieve (mm)	Percent Passing (%)
2" (50.0)	100
1½" (37.5)	90 - 100
1" (25.0)	90 max.
No. 4 (4.75)	-
No. 8 (2.36)	15 - 41
No. 16 (1.18)	-
No. 30 (0.60)	-
No. 50 (0.30)	-
No. 200 (0.075)	0 - 6
Asphalt Binder Content	Design Value
% Air Voids	4.0
% VMA	11.5 – 13.0
Minimum Water Sensitivity Ratio	80.0
% Anti-strip	As Required
Fines to Asphalt Ratio*	0.6 – 1.6
Wheel Tracking Test (8000 cycles, 100 psi, 64°C)	<u>Design Gyration</u>
	75 & 115
	160
	205
	<u>Maximum Rut</u>
	0.315 in. (8.000 mm)
	0.197 in. (5.000 mm)
	0.197 in. (5.000 mm)

*Fines to asphalt ratio shall be defined as the percent materials passing the No. 200 (0.075 mm) sieve (expressed as a percent of total aggregate weight) divided by the effective asphalt binder content.

ARKANSAS DEPARTMENT OF TRANSPORTATION
SUPPLEMENTAL SPECIFICATION
PERCENT AIR VOIDS FOR ACHM MIX DESIGNS

Table 406-1 of **Subsection 406.04, Construction Requirements and Acceptance**, is hereby deleted and the following substituted therefor:

Table 406-1		
Design Requirements for Asphalt Concrete Hot Mix Binder Course		
(1" [25 mm])		
Control Points		
Sieve (mm)	Percent Passing (%)	
1½" (37.5)	100	
1" (25.0)	90 - 100	
¾" (19.0)	90 max.	
No. 4 (4.75)	-	
No. 8 (2.36)	19 - 45	
No. 16 (1.18)	-	
No. 30 (0.60)	-	
No. 50 (0.30)	-	
No. 200 (0.075)	1 - 7	
Asphalt Binder Content	Design Value	
% Air Voids	4.0	
% VMA	12.5 – 14.0	
Minimum Water Sensitivity Ratio	80	
% Anti-strip	As Required	
Fines to Asphalt Ratio*	0.6 – 1.6	
Wheel Tracking Test (8000 cycles, 100 psi, 64°C)	<u>Design Gyration</u>	<u>Maximum Rut</u>
	75 & 115	0.315 in. (8.000 mm)
	160	0.197 in. (5.000 mm)
	205	0.197 in. (5.000 mm)

*Fines to asphalt ratio shall be defined as the percent materials passing the No. 200 (0.075 mm) sieve (expressed as a percent of total aggregate weight) divided by the effective asphalt binder content.

ARKANSAS DEPARTMENT OF TRANSPORTATION
SUPPLEMENTAL SPECIFICATION
PERCENT AIR VOIDS FOR ACHM MIX DESIGNS

Table 407-1 and Table 407-2 of **Subsection 407.04, Construction Requirements and Acceptance**, are hereby deleted and the following substituted therefor:

Table 407-1		
Design Requirements for Asphalt Concrete Hot Mix Surface Course (1/2" [12.5 mm])		
	Control Points	
Sieve (mm)	Percent Passing (%)	
3/4" (19.0)	100	
1/2" (12.5)	90 - 100	
3/8" (9.5)	90 max.	
No. 8 (2.36)	28 - 58	
No. 16 (1.18)	-	
No. 30 (0.60)	-	
No. 50 (0.30)	-	
No. 200 (0.075)	2 - 10	
Asphalt Binder Content	Design Value	
% Air Voids	4.0	
% VMA	14.0 – 16.0	
Minimum Water Sensitivity Ratio	80.0	
% Anti-strip	As Required	
Fines to Asphalt Ratio*	0.6 – 1.6	
Wheel Tracking Test	<u>Design Gyration</u>	<u>Maximum Rut</u>
(8000 cycles, 100 psi, 64°C)	75 & 115	0.315 in. (8.000 mm)
	160	0.197 in. (5.000 mm)
	205	0.197 in. (5.000 mm)

*Fines to asphalt ratio shall be defined as the percent materials passing the No. 200 (0.075 mm) sieve (expressed as a percent of total aggregate weight) divided by the effective asphalt binder content.

ARKANSAS DEPARTMENT OF TRANSPORTATION
SUPPLEMENTAL SPECIFICATION
PERCENT AIR VOIDS FOR ACHM MIX DESIGNS

Table 407-2
Design Requirements for Asphalt Concrete Hot Mix Surface Course (3/8" [9.5 mm])

Sieve (mm)	Control Points	
	Percent Passing (%)	
1/2" (12.5)	100	
3/8" (9.5)	90 - 100	
No. 4 (4.75)	90 max.	
No. 8 (2.36)	32 - 67	
No. 16 (1.18)	-	
No. 30 (0.60)	-	
No. 50 (0.30)	-	
No. 200 (0.075)	2 - 10	
Asphalt Binder Content	Design Value	
% Air Voids	4.0	
% VMA	15.0 – 17.0	
Minimum Water Sensitivity Ratio	80.0	
% Anti-strip	As Required	
Fines to Asphalt Ratio*	0.6 – 1.6	
Wheel Tracking Test (8000 cycles, 100 psi, 64°C)	<u>Design Gyration</u>	<u>Maximum Rut</u>
	75 & 115	0.315 in. (8.000 mm.)
	160	0.197 in. (5.000 mm)
	205	0.197 in. (5.000 mm)

*Fines to asphalt ratio shall be defined as the percent materials passing the No. 200 (0.075 mm) sieve (expressed as a percent of total aggregate weight) divided by the effective asphalt binder content.

ARKANSAS DEPARTMENT OF TRANSPORTATION
SUPPLEMENTAL SPECIFICATION
LIQUID ANTI-STRIP ADDITIVE

Division 400 of the Standard Specifications for Highway Construction, Edition of 2014, is hereby amended as follows:

Section 404, DESIGN AND QUALITY CONTROL OF ASPHALT MIXTURES, is hereby modified as follows:

The following is added as the last bullet following the first paragraph of **Subsection 404.01(b), Design Requirements**:

- All ACHM mixes must contain a liquid, anti-strip additive.

Section 409, MATERIALS AND EQUIPMENT FOR ASPHALT CONCRETE PLANT MIX COURSES, is hereby modified as follows:

The second paragraph of **Subsection 409.02 Asphalt Binder** is hereby deleted and the following is substituted therefor:

The asphalt binder for all Asphalt Concrete Hot Mixes shall contain a heat-stable, liquid anti-strip additive. The additive shall be furnished from the Qualified Products List. The additive shall not harm the completed bituminous concrete mixture and must be compatible with the aggregate and asphalt binder supplied for the project. The anti-strip additive shall be added either by an in-line blending process just before introduction of the asphalt binder to the mixer or by blending with the asphalt binder at the asphalt binder terminal. If blended at the terminal, the bill of lading accompanying the load being delivered to the hot mix asphalt plant shall include the anti-strip manufacturer's name, product name, and quantity of all anti-strip additive included in the load.

The liquid anti-strip additive shall be added at rates as indicated below:

- For ACHM mixes where the use of an anti-strip additive is required as determined by the laboratory analysis and mix design procedures, the anti-strip additive shall be added at the rate of 0.50% to 0.75% by weight of asphalt binder as determined by the laboratory analysis and laboratory mix design procedures.
- For all other mixes, the manufacturer's recommended dosage of the additive shall be used, but the rate of liquid anti-strip additive shall not be less than 0.25% by weight of the asphalt binder.

ARKANSAS DEPARTMENT OF TRANSPORTATION

SUPPLEMENTAL SPECIFICATION

**CONSTRUCTION REQUIREMENTS AND ACCEPTANCE OF
ASPHALT CONCRETE PLANT MIX COURSES**

Section 410, Construction Requirements and Acceptance of Asphalt Concrete Plant Mix Courses, of the Standard Specifications for Highway Construction, Edition of 2014, is hereby modified as follows:

Subsection 410.10 Incentives is hereby deleted.

ARKANSAS DEPARTMENT OF TRANSPORTATION
SUPPLEMENTAL SPECIFICATION
DEVICES FOR MEASURING DENSITY FOR ROLLING PATTERNS

Section 410 of the Standard Specifications for Highway Construction, Edition of 2014, is hereby amended as follows:

The fourth sentence of the first paragraph of **Subsection 410.08, Rolling and Density Requirements and Joints**, is hereby deleted and the following substituted therefor:

The Engineer will observe the Contractor's use of an electromagnetic surface contact device that meets ASTM D7113/D7113M or the use of a nuclear density gauge to verify that the maximum densities possible are obtained.

ARKANSAS DEPARTMENT OF TRANSPORTATION
SUPPLEMENTAL SPECIFICATION
RETROREFLECTIVE SHEETING FOR
TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES

Section 604 of the Standard Specifications for Highway Construction, Edition of 2014, is hereby amended as follows:

The following is inserted after the first paragraph of Subsection 604.02(b):

Retroreflective sheeting used on traffic drums shall meet the requirements of ASTM D4956 for Type III or IV with the additional requirements for Reboundable Sheeting. Retroreflective sheeting for delineators shall comply with section 728.

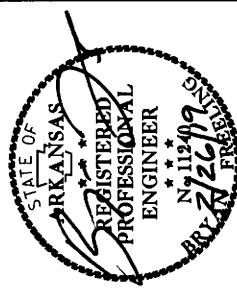
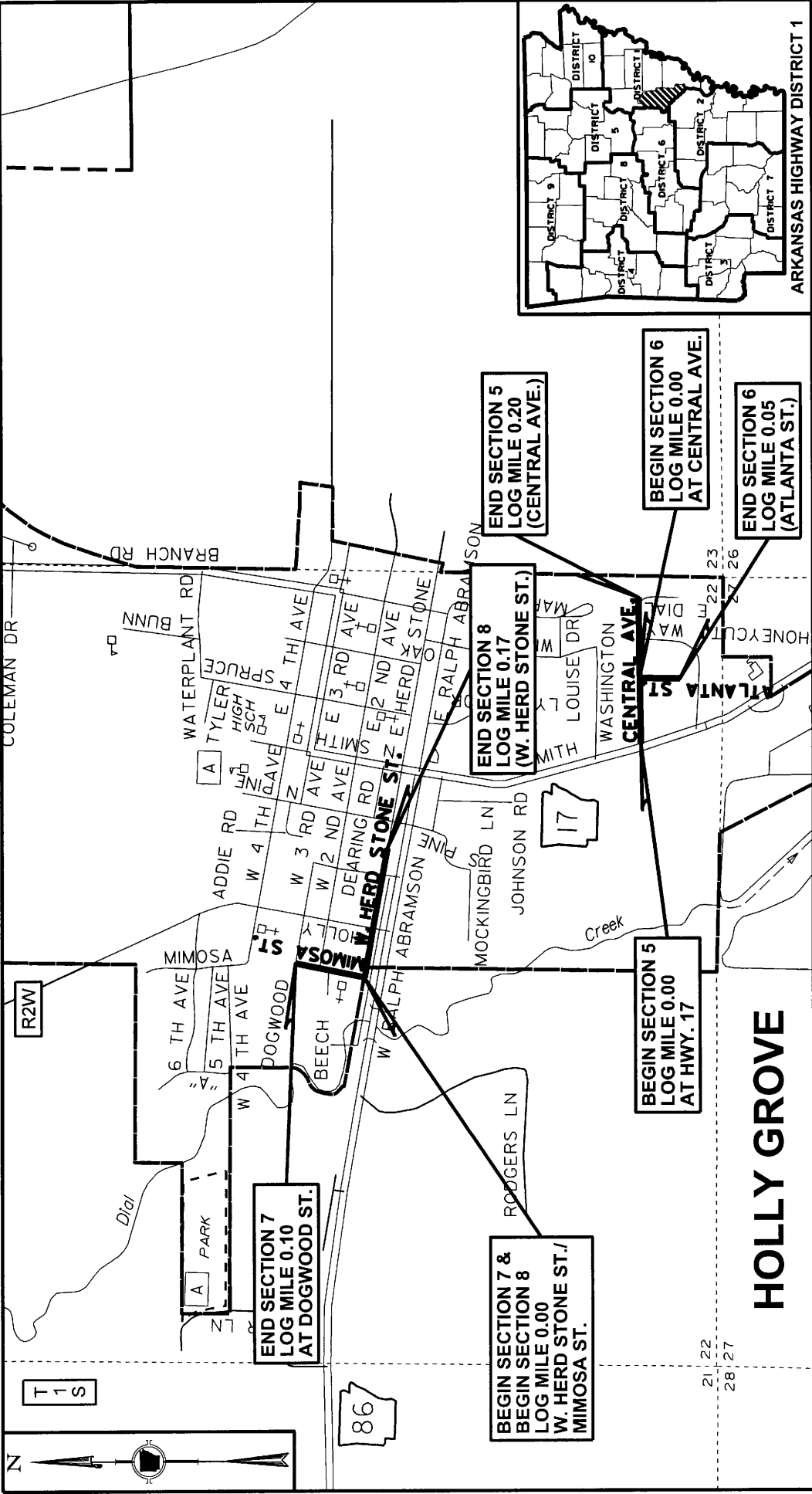
Retroreflective sheeting shall be applied to a properly treated substrate with mechanical equipment and in a manner specified by the sheeting manufacturer. Sign material (substrate) shall be of sufficient thickness and stability to maintain a substantial, effective sign for the duration of the project. One splice will be allowed in retroreflective sheeting on sign blanks. "Left", "Right", "Distances", and "Ahead" will be allowed on signs as inserts. All letters and numerals on inserts shall be of the same size and series as those on the sign face.

ARKANSAS DEPARTMENT OF TRANSPORTATION
SUPPLEMENTAL SPECIFICATION
PIPE CULVERTS FOR SIDE DRAINS

Section 606 of the Standard Specifications for Highway Construction, Edition of 2014, is hereby amended as follows:

The second paragraph of **Subsection 606.01** is hereby deleted and the following substituted therefore:

For side drains, when the type is not specified on the plans, the Contractor may furnish any of the types listed in Subsection 606.02 provided that only one type and material shall be used for all side drains of like cross-sectional shape on the project. In addition, when circular pipe is specified for a side drain the Contractor may, at no additional cost to the Department, substitute an arch pipe providing the equivalent waterway.

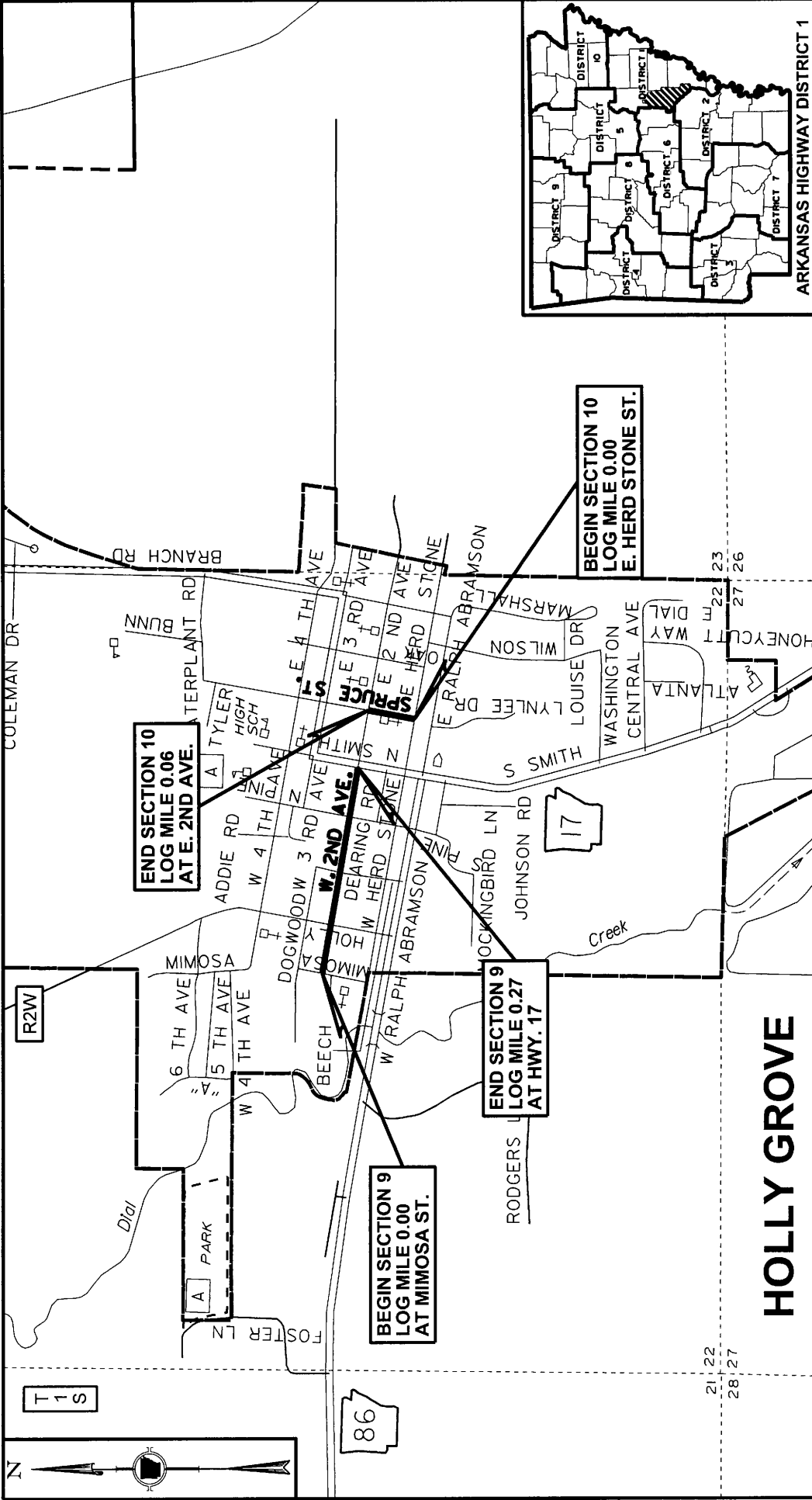


JOB C48002

HOLLY GROVE OVERLAY (SEL. SECS.) (S)

VARIOUS CITY STREETS

MONROE COUNTY



JOB C48002

HOLLY GROVE OVERLAY (SEL. SECS.) (S)

VARIOUS CITY STREETS

MONROE COUNTY

INDEX OF SHEETS

SHEET NO.

TITLE

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ROADWAY STANDARD DRAWINGS

DRWG. NO.

TITLE

DATE

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TC-1	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	04-13-17
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GOVERNING SPECIFICATIONS

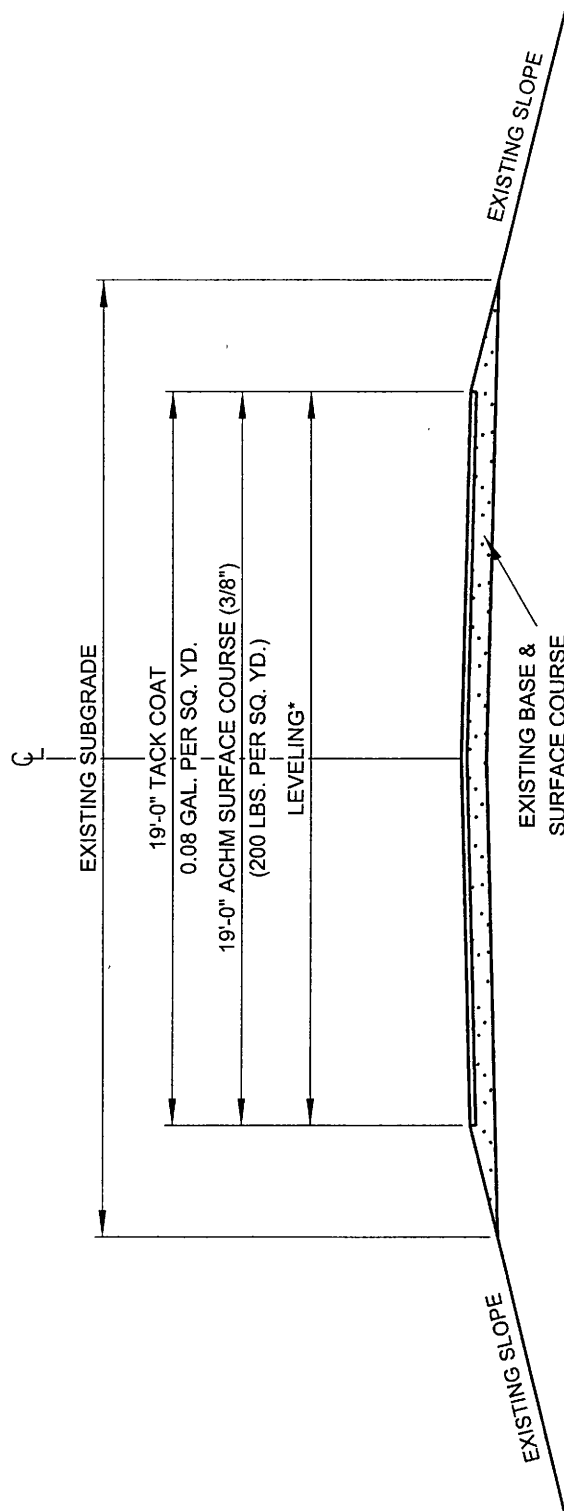
ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION,
EDITION OF 2014, AND THE FOLLOWING SPECIAL PROVISIONS AND SUPPLEMENTAL SPECIFICATIONS.

NUMBER	TITLE
ERRATA	ERRATA FOR THE BOOK OF STANDARD SPECIFICATIONS
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102-2	ISSUANCE OF PROPOSALS
108-1	LIQUIDATED DAMAGES
108-2	WORK ALLOWED PRIOR TO ISSUANCE OF WORK ORDER
306-1	QUALITY CONTROL AND ACCEPTANCE
400-1	TACK COATS
400-4	DESIGN AND QUALITY CONTROL OF ASPHALT MIXTURES
400-5	PERCENT AIR VOIDS FOR ACHM MIX DESIGNS
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JOB C48002	BIDDING REQUIREMENTS AND CONDITIONS
JOB C48002	BROADBAND INTERNET SERVICE FOR ASPHALT CONCRETE PLANT
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JOB C48002	MANDATORY ELECTRONIC CONTRACT
JOB C48002	MANDATORY ELECTRONIC DOCUMENT SUBMITTAL
JOB C48002	PLASTIC PIPE
JOB C48002	RECYCLED ASPHALT SHINGLES
JOB C48002	SETTLEMENT AGREEMENTS
JOB C48002	SUBMISSION OF ASPHALT CONCRETE HOT MIX ACCEPTANCE TEST RESULTS
JOB C48002	WARM MIX ASPHALT

GENERAL NOTES

1. SPEED BUMPS TO BE REMOVED BY THE CONTRACTOR. REMOVAL OF SPEED BUMPS WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE CONSIDERED INCLUDED IN THE CONTRACT PRICES BID FOR OTHER ITEMS OF THE CONTRACT.
2. SUPPLYING UTILITY RISERS AND INSTALLATION OF PERMANENT TRAFFIC SAFETY SIGNS NOT SHOWN IN THE PLANS ARE THE RESPONSIBILITIES OF THE CITY OF HOLLY GROVE.
3. THE SEQUENCE AS SHOWN ON THE MAINTENANCE OF TRAFFIC PLANS IS A GENERAL OUTLINE FOR THE CONSTRUCTION OF THIS PROJECT, AND IN NO WAY IS IT INTENDED TO COVER EVERY ITEM IN THIS PROJECT. ITEMS NOT CRITICAL TO THE CONSTRUCTION SEQUENCE MAY BE CONSTRUCTED IN ANY STAGE AS APPROVED BY THE RESIDENT ENGINEER.
4. THE CONTRACTOR SHALL CLIP GRASS AND DEBRIS FROM THE EDGE OF THE EXISTING ROADWAY. THESE "CLIPPINGS" SHALL BE PULLED UP TO THE EDGE OF THE NEW PAVEMENT IN SECTIONS WHERE THE SHOULDERS ARE NOT BEING REBUILT WITH AGGREGATE OR BORROW. NO DIRECT PAYMENT WILL BE MADE FOR THIS WORK.

NOTE: DETAILS MAY BE MODIFIED TO MEET LOCAL
CONDITIONS AS DIRECTED BY THE ENGINEER.



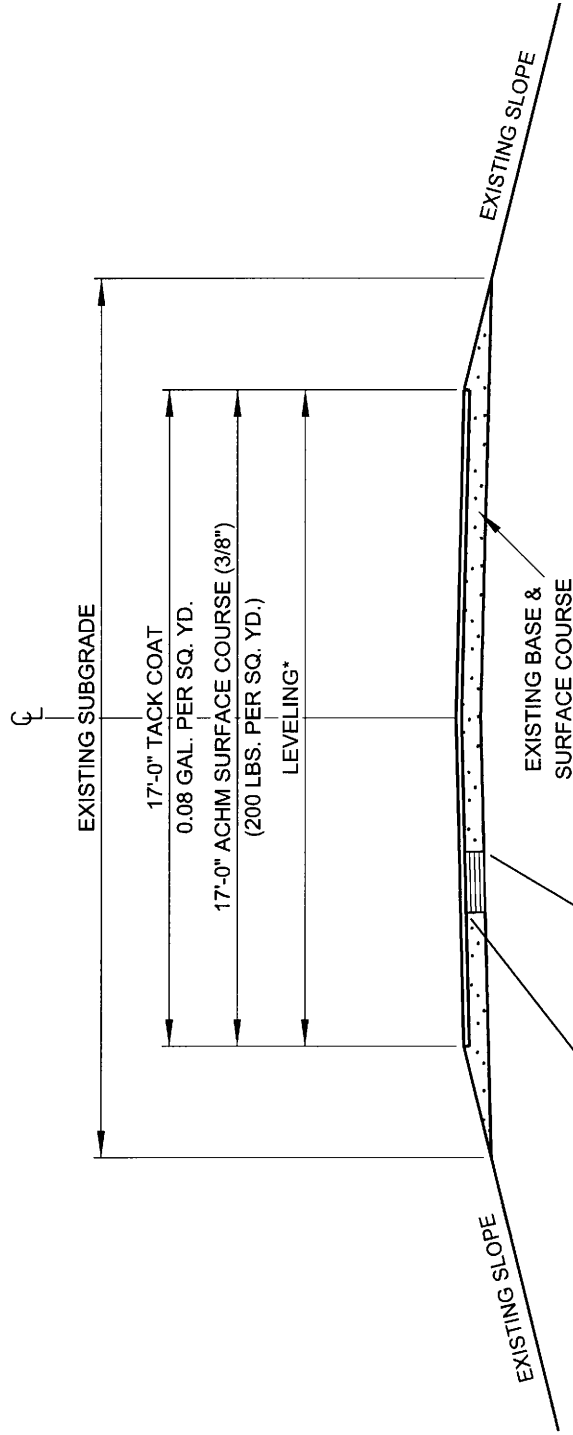
TYPICAL SECTIONS OF IMPROVEMENT

HOLLY GROVE

SECTION 1 - N. PINE STREET - L.M. 0.00 TO 0.17

* LOCATION AND APPLICATION RATES
ARE AT THE DIRECTION OF THE
ENGINEER. SEE QUANTITY SHEET FOR
ESTIMATED AMOUNTS.

NOTE: DETAILS MAY BE MODIFIED TO MEET LOCAL CONDITIONS AS DIRECTED BY THE ENGINEER.



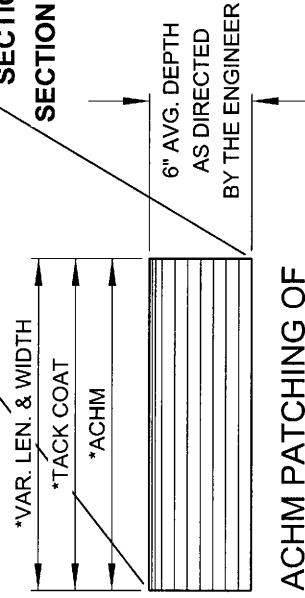
TYPICAL SECTIONS OF IMPROVEMENT

HOLLY GROVE

SECTION 2 - E. 4TH AVENUE - L.M. 0.00 TO 0.38

SECTION 3 - OAK STREET - L.M. 0.00 TO 0.16

SECTION 5 - CENTRAL AVENUE - L.M. 0.00 TO 0.20



ACHM PATCHING OF EXISTING ROADWAY

PAY ITEMS AND CONSTRUCTION

REQUIREMENTS ARE AS DEFINED

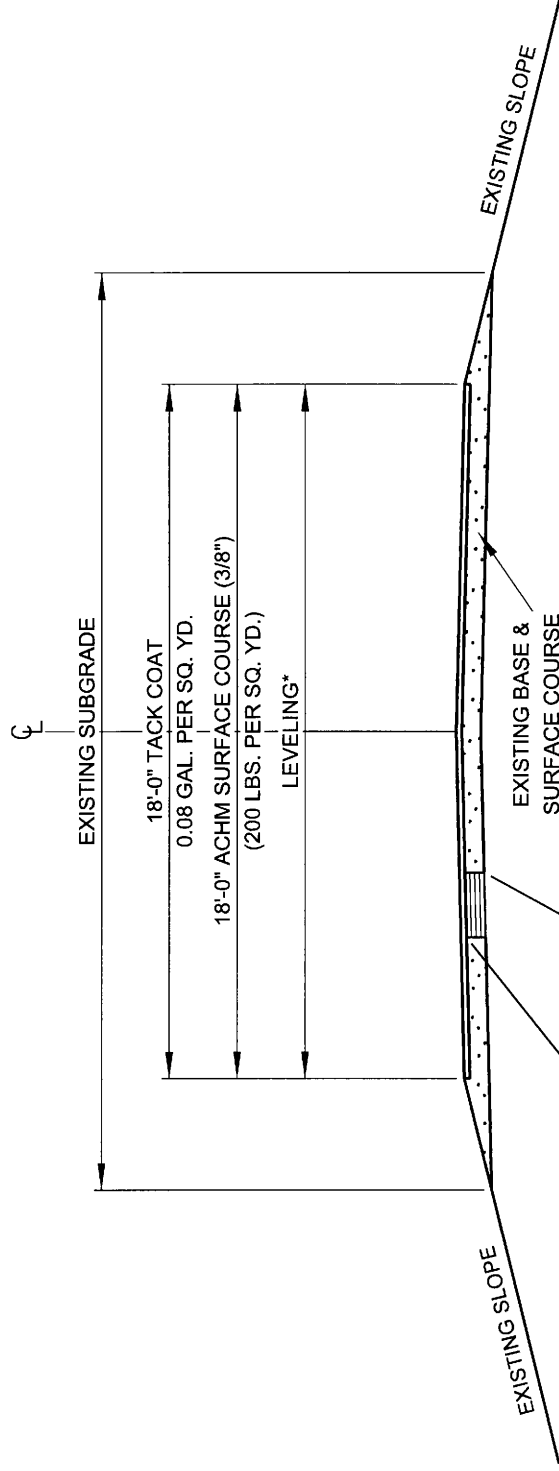
IN SECTION 415 OF THE STANDARD

SPECIFICATIONS FOR HIGHWAY

CONSTRUCTION, 2014.

* LOCATION AND APPLICATION RATES
ARE AT THE DIRECTION OF THE
ENGINEER. SEE QUANTITY SHEET FOR
ESTIMATED AMOUNTS.

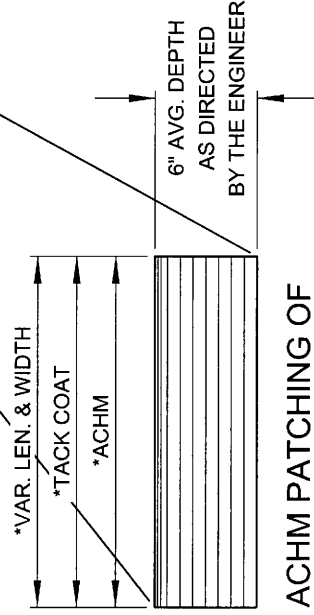
NOTE: DETAILS MAY BE MODIFIED TO MEET LOCAL
CONDITIONS AS DIRECTED BY THE ENGINEER.



TYPICAL SECTIONS OF IMPROVEMENT

HOLLY GROVE

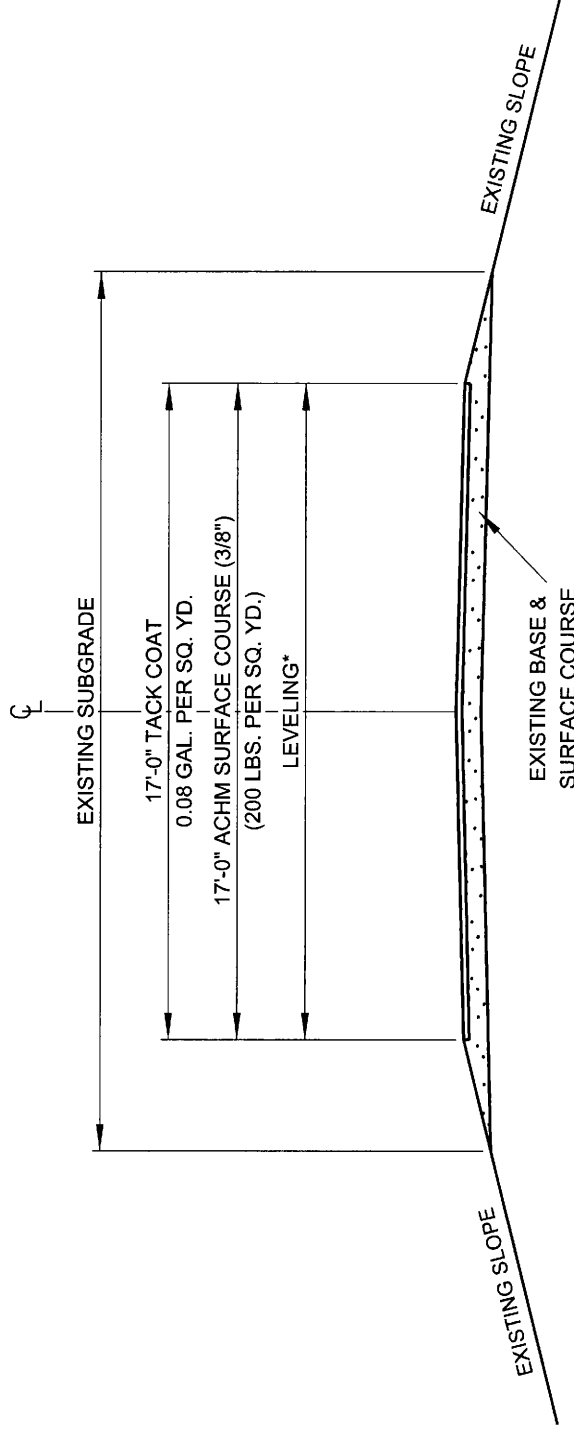
SECTION 4 - DOGWOOD STREET - L.M. 0.00 TO 0.16



ACHM PATCHING OF
EXISTING ROADWAY
PAY ITEMS AND CONSTRUCTION
REQUIREMENTS ARE AS DEFINED
IN SECTION 415 OF THE STANDARD
SPECIFICATIONS FOR HIGHWAY
CONSTRUCTION, 2014.

* LOCATION AND APPLICATION RATES
ARE AT THE DIRECTION OF THE
ENGINEER. SEE QUANTITY SHEET FOR
ESTIMATED AMOUNTS.

NOTE: DETAILS MAY BE MODIFIED TO MEET LOCAL
CONDITIONS AS DIRECTED BY THE ENGINEER.



TYPICAL SECTIONS OF IMPROVEMENT

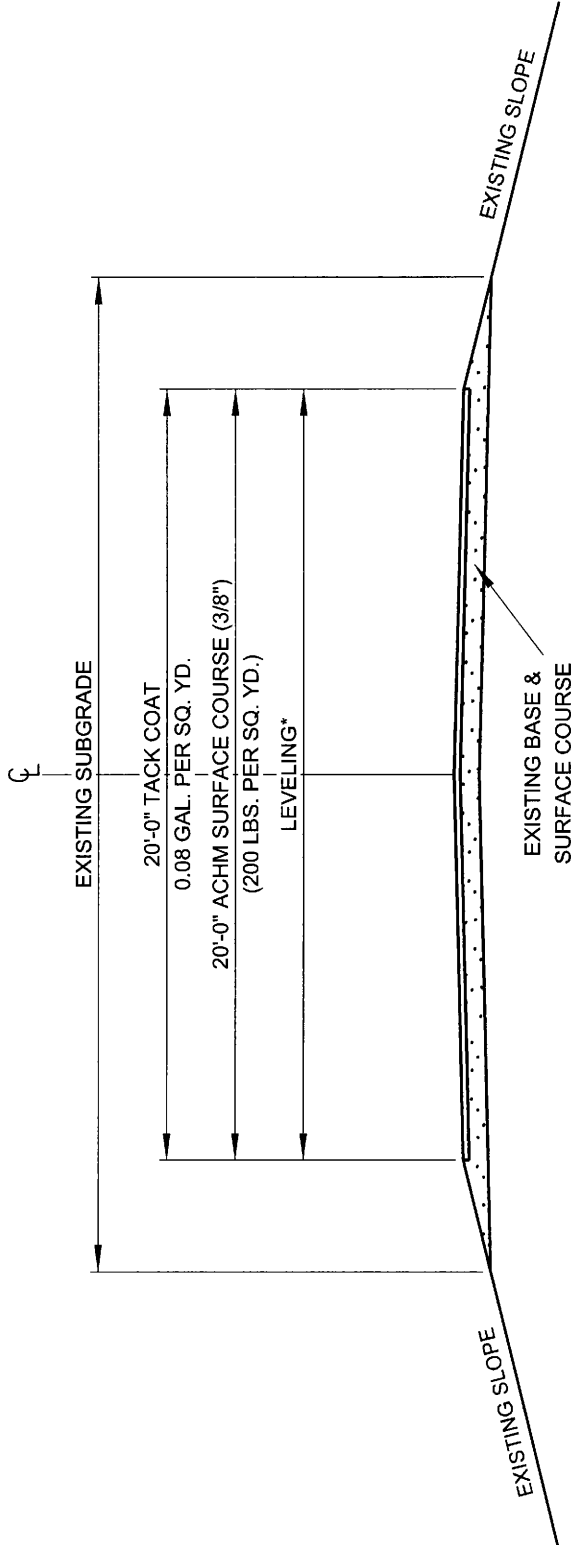
HOLLY GROVE

SECTION 6 - ATLANTA STREET - L.M. 0.00 TO 0.05

SECTION 10 - SPRUCE STREET - L.M. 0.00 TO 0.06

* LOCATION AND APPLICATION RATES
ARE AT THE DIRECTION OF THE
ENGINEER. SEE QUANTITY SHEET FOR
ESTIMATED AMOUNTS.

NOTE: DETAILS MAY BE MODIFIED TO MEET LOCAL
CONDITIONS AS DIRECTED BY THE ENGINEER.



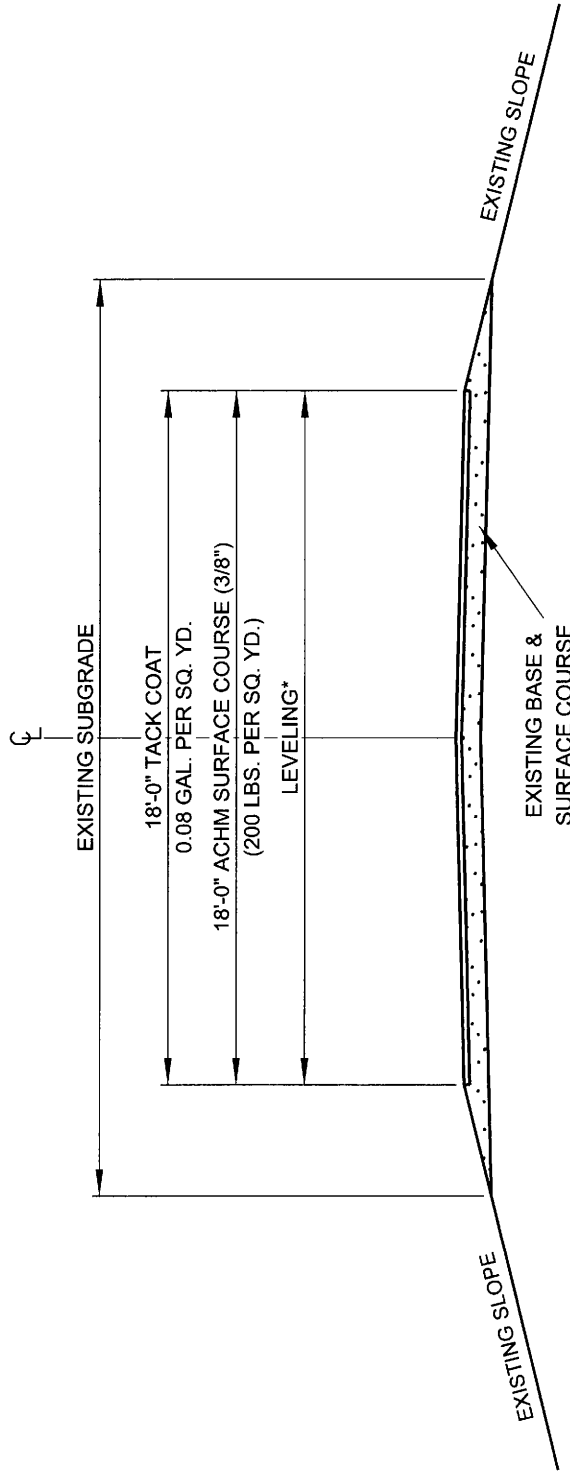
TYPICAL SECTIONS OF IMPROVEMENT

HOLLY GROVE

SECTION 7 - MIMOSA STREET - L.M. 0.00 TO 0.10

* LOCATION AND APPLICATION RATES
ARE AT THE DIRECTION OF THE
ENGINEER. SEE QUANTITY SHEET FOR
ESTIMATED AMOUNTS.

NOTE: DETAILS MAY BE MODIFIED TO MEET LOCAL
CONDITIONS AS DIRECTED BY THE ENGINEER.



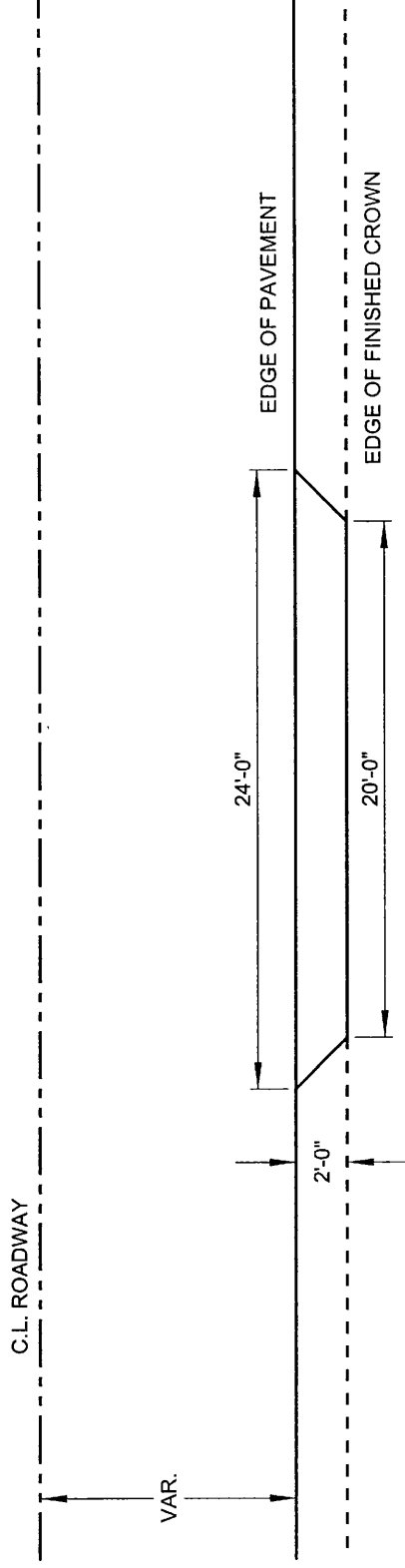
TYPICAL SECTIONS OF IMPROVEMENT

HOLLY GROVE

SECTION 8 - W. HERD STONE STREET - L.M. 0.00 TO 0.17

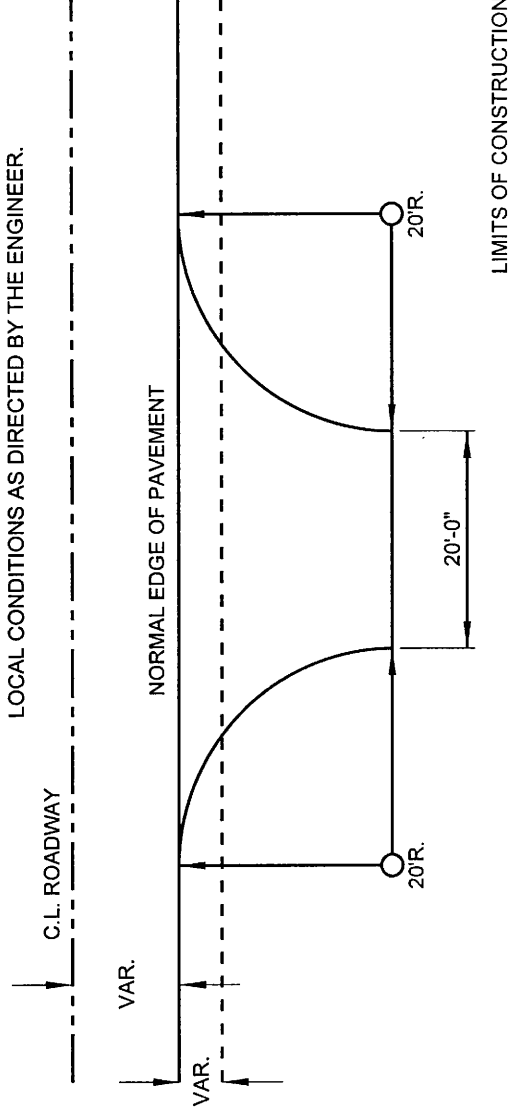
SECTION 9 - W. 2ND AVENUE - L.M. 0.00 TO 0.27

* LOCATION AND APPLICATION RATES
ARE AT THE DIRECTION OF THE
ENGINEER. SEE QUANTITY SHEET FOR
ESTIMATED AMOUNTS.

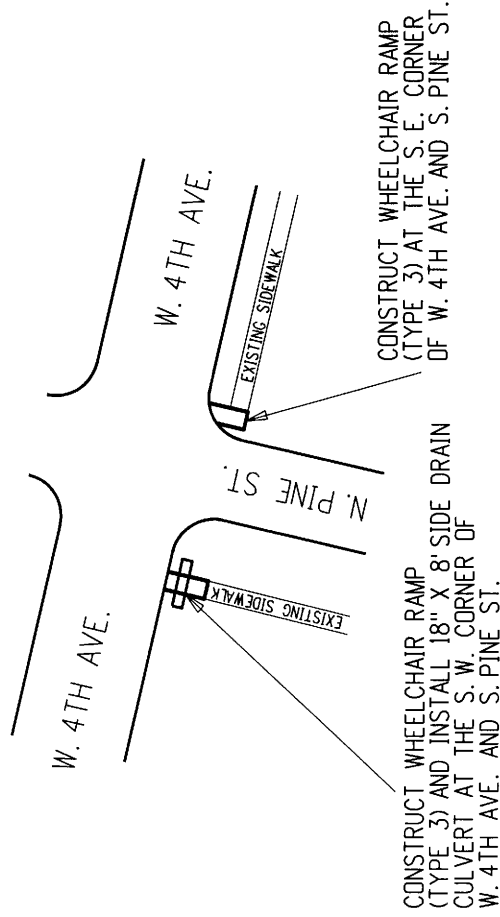
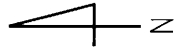


TYPICAL PRIVATE ENTRANCE
ADDITIONAL SURFACING AREA = 4.9 SQ. YDS.

NOTE: DIMENSIONS MAY BE MODIFIED TO MEET
 LOCAL CONDITIONS AS DIRECTED BY THE ENGINEER.

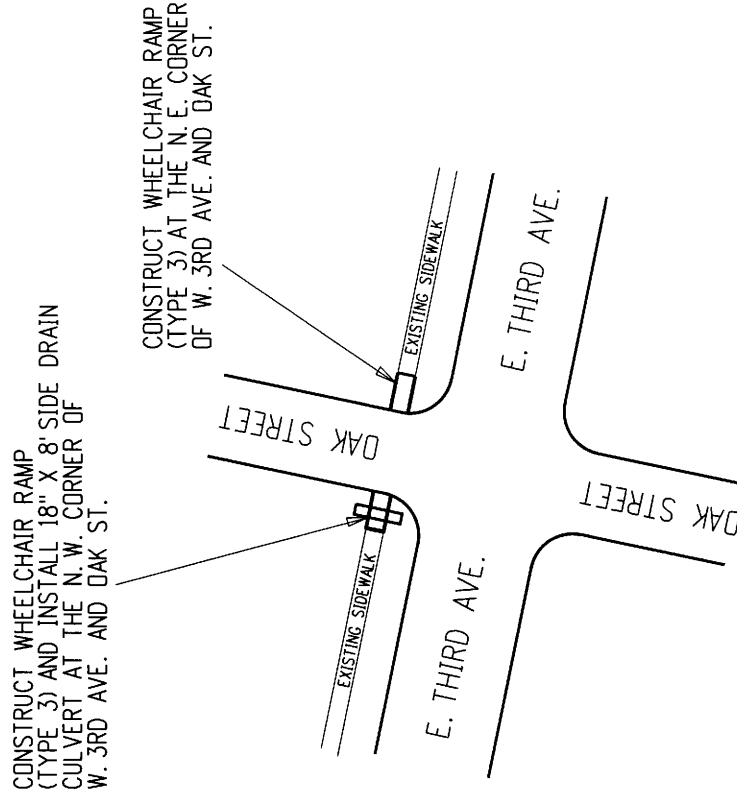


TYPICAL CITY TURNOUTS
ADDITIONAL SURFACING AREA = 63.5 SQ. YDS.



N. PINE STREET
(SECTION 1)

(NOT TO SCALE)



OAK STREET
(SECTION 3)

(NOT TO SCALE)

DETAILS OF STREET INTERSECTIONS FOR WHEELCHAIR RAMPS (TYPE 3)

REFER TO STANDARD DRAWING WR-1 FOR ADDITIONAL DETAILS

PATCHING AND SURFACING QUANTITIES (BOX 1 OF 3)

DESCRIPTION	LOG MILE		LENGTH LIN. FT.	ACHM PATCHING OF EXISTING ROADWAY**	TACK COAT			ACHM SURFACE COURSE (3/8")*		
	FROM	TO			WIDTH	SQ. YD.	GAL.	WIDTH	SQ. YD.	TON
	SECTION 1 - N. PINE STREET									
MAIN LANES	0.00	0.17	898		19.00	1895.8	151.7	19.00	1895.8	189.6
6 PRIVATE ENTRANCES						29.4	2.4		29.4	2.9
6 CITY STREETS						381.0	30.5		381.0	38.1
LEVELING							30.0			20.0
SECTION 2 - E. 4TH AVENUE										
MAIN LANES	0.00	0.38	1986	25.0	17.00	3751.3	300.1	17.00	3751.3	375.1
(20' EXCEPTION @ BRANCH RD./HWY. 17)										
19 PRIVATE ENTRANCES						93.1	7.4		93.1	9.3
4 CITY STREETS						254.0	20.3		254.0	25.4
LEVELING							82.5			55.0
SECTION 3 - OAK STREET										
MAIN LANES	0.00	0.16	825	15.0	17.00	1558.3	124.7	17.00	1558.3	155.8
(20' EXCEPTION @ 3RD AVE./HWY. 17)										
8 PRIVATE ENTRANCES						39.2	3.1		39.2	3.9
LEVELING							22.5			15.0
SECTION 4 - DOGWOOD STREET										
MAIN LANES	0.00	0.16	845	25.0	18.00	1690.0	135.2	18.00	1690.0	169.0
13 PRIVATE ENTRANCES						63.7	5.1		63.7	6.4
LEVELING							37.5			25.0
SUBTOTALS (BOX 1 OF 3):				65.0			953.0			1090.5

BASIS OF ESTIMATE:

TACK COAT

ACHM SURFACE COURSE (3/8")

0.08 GAL. PER SQ. YD.

200 POUND PER SQ. YD.

***Nmax=115**

VOLUME CONTROL:

ASPHALT BINDER (PG 64-22) IN ACHM SURFACE COURSE (3/8")

5.5%

MINERAL AGGREGATE IN ACHM SURFACE COURSE (3/8")

94.5%

**QUANTITY ESTIMATED. TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER. SEE SECTION 104.03 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 2014.

PATCHING AND SURFACING QUANTITIES (BOX 2 OF 3)

DESCRIPTION	LOG MILE		LENGTH LIN. FT.	ACHM PATCHING OF EXISTING ROADWAY**	TACK COAT			ACHM SURFACE COURSE (3/8")*		
	FROM	TO			WIDTH	SQ. YD.	GAL.	WIDTH	SQ. YD.	TON
SECTION 5 - CENTRAL AVENUE										
MAIN LANES	0.00	0.20	1056	10.0	17.00	1994.7	159.6	17.00	1994.7	199.5
13 PRIVATE ENTRANCES						63.7	5.1		63.7	6.4
1 CITY STREET						63.5	5.1		63.5	6.4
LEVELING							30.0			20.0
SECTION 6 - ATLANTA STREET										
MAIN LANES	0.00	0.05	264		17.00	498.7	39.9	17.00	498.7	49.9
3 PRIVATE ENTRANCES						14.7	1.2		14.7	1.5
LEVELING							7.5			5.0
SECTION 7 - MIMOSA STREET										
MAIN LANES	0.00	0.10	528		20.00	1173.3	93.9	20.00	1173.3	117.3
4 PRIVATE ENTRANCES						19.6	1.6		19.6	2.0
LEVELING							15.0			10.0
SECTION 8 - W. HERD STONE STREET										
MAIN LANES	0.00	0.17	898		18.00	1796.0	143.7	18.00	1796.0	179.6
8 PRIVATE ENTRANCES						39.2	3.1		39.2	3.9
4 CITY STREETS						254.0	20.3		254.0	25.4
LEVELING							30.0			20.0
SUBTOTALS (BOX 2 OF 3):				10.0			556.0			646.9

BASIS OF ESTIMATE:

TACK COAT _____ 0.08 GAL. PER SQ. YD.
 ACHM SURFACE COURSE (3/8") _____ 200 POUND PER SQ. YD.

***Nmax=115**

VOLUME CONTROL:

ASPHALT BINDER (PG 64-22) IN ACHM SURFACE COURSE (3/8") _____ 5.5%
 MINERAL AGGREGATE IN ACHM SURFACE COURSE (3/8") _____ 94.5%

**QUANTITY ESTIMATED. TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER. SEE SECTION 104.03 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 2014.

PATCHING AND SURFACING QUANTITIES (BOX 3 OF 3)

DESCRIPTION	LOG MILE		LENGTH LIN. FT.	ACHM PATCHING OF EXISTING ROADWAY**	TACK COAT				ACHM SURFACE COURSE (3/8")*			
	FROM	TO			WIDTH	SQ. YD.	GAL.	WIDTH	SQ. YD.	TON		
SECTION 9 - W. 2ND AVENUE												
MAIN LANES	0.00	0.27	1426		18.00	2852.0	228.2	18.00	2852.0	285.2		285.2
16 PRIVATE ENTRANCES						78.4	6.3		78.4	7.8		7.8
4 CITY STREETS						254.0	20.3		254.0	25.4		25.4
LEVELING							45.0			30.0		30.0
SECTION 10 - SPRUCE STREET												
MAIN LANES	0.00	0.06	317		17.00	598.8	47.9	17.00	598.8	59.9		59.9
5 PRIVATE ENTRANCES						24.5	2.0		24.5	2.5		2.5
LEVELING							7.5			5.0		5.0
SUBTOTALS (BOX 3 OF 3):				0.0			357.2			415.8		415.8
TOTALS:				75.0			1866.2			2153.2		2153.2
USE:				75			1866			2153		2153

BASIS OF ESTIMATE:

TACK COAT _____ 0.08 GAL. PER SQ. YD.
 ACHM SURFACE COURSE (3/8") _____ 200 POUND PER SQ. YD.

***Nmax=115**

VOLUME CONTROL:

ASPHALT BINDER (PG 64-22) IN ACHM SURFACE COURSE (3/8") _____ 5.5%
 MINERAL AGGREGATE IN ACHM SURFACE COURSE (3/8") _____ 94.5%

**QUANTITY ESTIMATED. TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER. SEE SECTION 104.03 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 2014.

STRUCTURES

LOG MILE	DESCRIPTION	PIPE		STANDARD DRAWING NUMBER
		SIDE DRAINS		
		18"		
		LIN. FT.		
SECTION 1 - N. PINE STREET STREET				
0.17	INSTALL PIPE CULVERT - RT. SIDE DRAIN	8		PCC-1
SECTION 3 - OAK STREET				
0.12	INSTALL PIPE CULVERT - LT. SIDE DRAIN	8		PCC-1
TOTAL:		16		

FOR R.C. PIPE CULVERT INSTALLATIONS USE TYPE 3 BEDDING UNLESS OTHERWISE SPECIFIED.

TRAFFIC CONTROL DEVICES

LOCATION	ROAD WORK AHEAD (W20-1)		G20-2	
	NO.	SQ. FT.	NO.	SQ. FT.
SECTION 1 - N. PINE STREET				
BEGIN SECTION	1	16.00	1	8.00
END SECTION	1	16.00	1	8.00
SECTION 2 - E. 4TH AVENUE				
BEGIN SECTION	1	16.00	1	8.00
L.M. 0.20 (BRANCH RD./HWY. 17)	2	32.00	2	16.00
END SECTION	1	16.00	1	8.00
SECTION 3 - OAK STREET				
BEGIN SECTION	1	16.00	1	8.00
L.M. 0.12 (3RD AVE./HWY. 17)	2	32.00	2	16.00
SECTION 4 - DOGWOOD STREET				
BEGIN SECTION	1	16.00	1	8.00
SECTION 5 - CENTRAL AVENUE				
BEGIN SECTION	1	16.00	1	8.00
SECTION 8 - W. HERD STONE STREET				
END SECTION	1	16.00	1	8.00
SECTION 9 - W. 2ND AVENUE				
END SECTION	1	16.00	1	8.00
SECTION 10 - SPRUCE STREET				
BEGIN SECTION	1	16.00	1	8.00
END SECTION	1	16.00	1	8.00
TOTALS:	15	240.00	15	120.00
TOTAL:				360.00

WHEELCHAIR RAMPS

LOCATION	DESCRIPTION	WHEELCHAIR RAMPS (TYPE 3)
		SQ. YD.
SECTION 1 - N. PINE STREET		
E. 4TH STREET	S. EAST CORNER	2.7
E. 4TH STREET	S. WEST CORNER	8.9
SECTION 3 - OAK STREET		
E. 3RD STREET	N. EAST CORNER	3.6
E. 3RD STREET	N. WEST CORNER	4.4
TOTAL:		19.6
USE:		20.0

REMOVAL AND DISPOSAL OF WALKS

LOCATION	DESCRIPTION	REMOVAL AND DISPOSAL OF CONCRETE WALKS
		SQ. YD.
SECTION 1 - N. PINE STREET		
E. 4TH STREET	S. EAST CORNER	2.7
SECTION 3 - OAK STREET		
E. 3RD STREET	N. EAST CORNER	3.6
E. 3RD STREET	N. WEST CORNER	4.4
TOTAL:		10.7
USE:		11

*NOTE: REMOVAL AND DISPOSAL OF SPEED BUMPS WILL NOT BE PAID FOR DIRECTLY, BUT WILL BE INCLUDED IN THE PRICE BID FOR VARIOUS CONTRACT ITEMS.

SUMMARY OF QUANTITIES

ITEM NO.	I T E M	QUANTITY	UNIT
202	REMOVAL AND DISPOSAL OF WALKS	11	SQ. YD.
SS & 401	TACK COAT	1866	GAL.
SP, SS, & 407	MINERAL AGGREGATE IN ACHM SURFACE COURSE (3/8")	2035	TON
SP, SS, & 407	ASPHALT BINDER (PG 64-22) IN ACHM SURFACE COURSE (3/8")	118	TON
SP, SS, & 415	ACHM PATCHING OF EXISTING ROADWAY	75	TON
601	MOBILIZATION	1.00	LUMP SUM
603	MAINTENANCE OF TRAFFIC	1.00	LUMP SUM
SS & 604	SIGNS	360	SQ. FT.
SP, SS, & 606	18" SIDE DRAIN	16	LIN. FT.
641	WHEELCHAIR RAMPS (TYPE 3)	20	SQ. YD.

REVISIONS

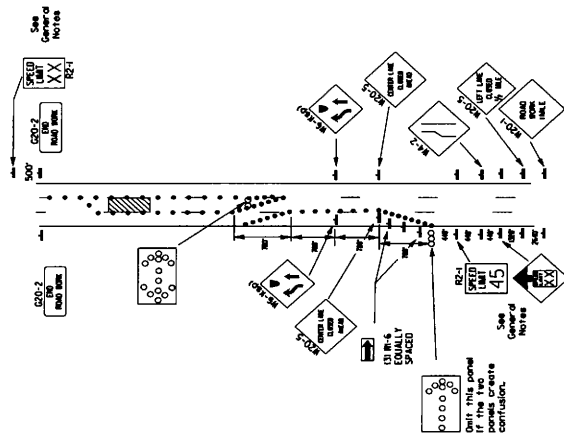
DATE	REVISION	SHEET NO.

REINFORCED CONCRETE HORIZONTAL ELLIPTICAL PIPE DIMENSIONS

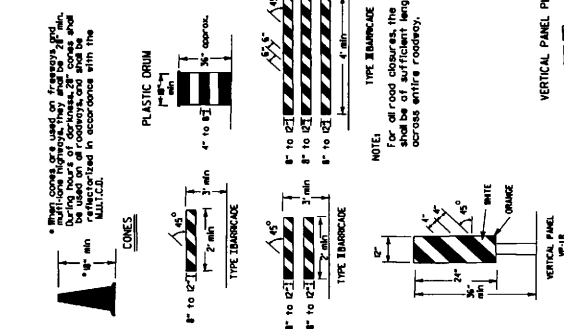
EQUIV. DIA.	SPAN		RISE
	ASHTO M 207 INCHES	ASHTO M 206 INCHES	
15	18	23	14
18	22	30	19
21	26	34	22
24	30	42	27
27	33	45	29
30	36	49	31
33	39	53	34
36	42	57	38
39	45	61	43
42	48	65	47
45	51	69	51
48	54	73	55
51	57	77	59
54	60	81	63
57	63	85	67
60	66	89	71
63	69	93	75
66	72	97	79
69	75	101	83
72	78	105	87
75	81	109	91
78	84	113	95
81	87	117	99
84	90	121	103
87	93	125	107
90	96	129	111
93	99	133	115
96	102	137	119
99	105	141	123
102	108	145	127
105	111	149	131
108	114	153	135
111	117	157	139
114	120	161	143
117	123	165	147
120	126	169	151
123	129	173	155
126	132	177	159
129	135	181	163
132	138	185	167
135	141	189	171
138	144	193	175
141	147	197	179
144	150	201	183
147	153	205	187
150	156	209	191
153	159	213	195
156	162	217	199
159	165	221	203
162	168	225	207
165	171	229	211
168	174	233	215
171	177	237	219
174	180	241	223
177	183	245	227
180	186	249	231
183	189	253	235
186	192	257	239
189	195	261	243
192	198	265	247
195	201	269	251
198	204	273	255
201	207	277	259
204	210	281	263
207	213	285	267
210	216	289	271
213	219	293	275
216	222	297	279
219	225	301	283
222	228	305	287
225	231	309	291
228	234	313	295
231	237	317	299
234	240	321	303
237	243	325	307
240	246	329	311
243	249	333	315
246	252	337	319
249	255	341	323
252	258	345	327
255	261	349	331
258	264	353	335
261	267	357	339
264	270	361	343
267	273	365	347
270	276	369	351
273	279	373	355
276	282	377	359
279	285	381	363
282	288	385	367
285	291	389	371
288	294	393	375
291	297	397	379
294	300	401	383
297	303	405	387
300	306	409	391
303	309	413	395
306	312	417	399
309	315	421	403
312	318	425	407
315	321	429	411
318	324	433	415
321	327	437	419
324	330	441	423
327	333	445	427
330	336	449	431
333	339	453	435
336	342	457	439
339	345	461	443
342	348	465	447
345	351	469	451
348	354	473	455
351	357	477	459
354	360	481	463
357	363	485	467
360	366	489	471
363	369	493	475
366	372	497	479
369	375	501	483
372	378	505	487
375	381	509	491
378	384	513	495
381	387	517	499
384	390	521	503
387	393	525	507
390	396	529	511
393	399	533	515
396	402	537	519
399	405	541	523
402	408	545	527
405	411	549	531
408	414	553	535
411	417	557	539
414	420	561	543
417	423	565	547
420	426	569	551
423	429	573	555
426	432	577	559
429	435	581	563
432	438	585	567
435	441	589	571
438	444	593	575
441	447	597	579
444	450	601	583
447	453	605	587
450	456	609	591
453	459	613	595
456	462	617	599
459	465	621	603
462	468	625	607
465	471	629	611
468	474	633	615
471	477	637	619
474	480	641	623
477	483	645	627
480	486	649	631
483	489	653	635
486	492	657	639
489	495	661	643
492	498	665	647
495	501	669	651
498	504	673	655
501	507	677	659
504	510	681	663
507	513	685	667
510	516	689	671
513	519	693	675
516	522	697	679
519	525	701	683
522	528	705	687
525	531	709	691
528	534	713	695
531	537	717	699
534	540	721	703
537	543	725	707
540	546	729	711
543	549	733	715
546	552	737	719
549	555	741	723
552	558	745	727
555	561	749	731
558	564	753	735
561	567	757	739
564	570	761	743
567	573	765	747
570	576	769	751
573	579	773	755
576	582	777	759
579	585	781	763
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612	618	825	807
615	621	829	811
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630	636	849	831
633	639	853	835
636	642	857	839
639	645	861	843
642	648	865	847
645	651	869	851
648	654	873	855
651	657	877	859
654	660	881	863
657	663	885	867
660	666	889	871
663	669	893	875
666	672	897	879
669	675	901	883
672	678	905	887
675	681	909	891
678	684	913	895
681	687	917	899
684	690	921	903
687	693	925	907
690	696	929	911
693	699	933	915
696	702	937	919
699	705	941	923
702	708	945	927
705	711	949	931
708	714	953	935
711	717	957	939
714	720	961	943
717	723	965	947
720	726	969	951
723	729	973	955
726	732	977	959
729	735	981	963
732	738	985	967
735	741	989	971
738	744	993	975
741	747	997	979
744	750	1001	983
747	753	1005	987
750	756	1009	991
753	759	1013	995
756	762	1017	999
759	765	1021	1003
762	768	1025	1007
765	771	1029	1011
768	774	1033	1015
771	777	1037	1019
774	780	1041	1023
777	783	1045	1027
780	786	1049	1031
783	789	1053	1035
786	792	1057	1039
789	795	1061	1043
792	798	1065	1047
795	801	1069	1051
798	804	1073	1055
801	807	1077	1059
804	810	1081	1063
807	813	1085	1067
810	816	1089	1071
813	819	1093	1075
816	822	1097	1079
819	825	1101	1083
822	828	1105	1087
825	831	1109	1091
828	834	1113	1095
831	837	1117	1099
834	840	1121	1103
837	843	1125	1107
840	846	1129	1111
843	849	1133	1115
846	852	1137	1119
849	855	1141	1123
852	858	1145	1127
855	861	1149	1131
858	864	1153	1135
861	867	1157	1139
864	870	1161	1143
867	873	1165	1147
870	876	1169	1151
873	879	1173	1155
876	882	1177	1159
879	885	1181	1163
882	888	1185	1167
885	891	1189	1171
888	894	1193	1175
891	897	1197	1179
894	900	1201	1183
897	903	1205	1187
900	906	1209	1191
903	909	1213	1195
906	912	1217	1199
909	915	1221	1203
912	918	1225	1207
915	921	1229	1211
918	924	1233	1215
921	927	1237	1219
924	930	1241	1223
927	933	1245	1227
930	936	1249	1231
933	939	1253	1235
936	942	1257	1239
939	945	1261	1243
942	948	1265	1247
945	951	1269	1251
948	954	1273	1255
951	957	1277	1259
954	960	1281	1263
957	963	1285	1267
960	966	1289	1271
963	969	1293	1275
966	972	1297	1279
969	975	1301	

ADVANCE DISTANCES (XXXX)		500 FT	1/2 MILE	1000 FT	3/4 MILE	1500 FT	1 MILE	AHEAD																																																																																																																																																																																																								
GENERAL NOTES:																																																																																																																																																																																																																
1. ALL TRAFFIC CONTROL DEVICES USED ON ROAD CONSTRUCTION SHALL CONFORM TO THE LATEST EDITION OF THE STANDARD HIGHWAY SIGNS, LATEST EDITION, OR AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION.																																																																																																																																																																																																																
2. TRAFFIC CONTROL DEVICES SHALL BE SET UP JUST BEFORE THE START OF CONSTRUCTION OPERATIONS AND SHALL BE PROPERLY MAINTAINED DURING THE TIME SUCH CONDITIONS EXIST. THEY SHALL REMAIN IN PLACE ONLY AS LONG AS NEEDED AND REMOVED THEREAFTER.																																																																																																																																																																																																																
3. EXISTING SIGNS AND CONSTRUCTION SIGNS SHALL BE KEPT IN PROPER POSITION, AND BE CLEAN AND LEGIBLE AT ALL TIMES. SIGNS THAT DO NOT APPLY TO EXISTING CONDITIONS SHALL BE REMOVED. SIGNS THAT ARE DAMAGED, DEFACED, OR THAT ACCUMULATE DIRT DURING CONSTRUCTION SHALL BE CLEANED, REPAIRED, OR REPLACED.																																																																																																																																																																																																																
4. SIGNS ARE USUALLY MOUNTED ON A SINGLE POST, ALTHOUGH THOSE WIDER THAN 36" OR LARGER THAN 10 SO. FT. SHALL BE MOUNTED ON TWO POSTS OR ABOVE A TYPE "B" BARRICADE.																																																																																																																																																																																																																
5. SIGN POSTS DIRECT BURIED IN SOIL SHALL BE 2 LB. MINIMUM CHANNEL POST OR 4"x4" WHITE. ALL POSTS SHALL BE NEATLY CONSTRUCTED, AND SHALL BE REPLUMED, CLEANED, OR REPAIRED AS NEEDED FOR THE DURATION OF THE JOB. THERE SHALL NOT BE MORE THAN 2 POSTS IN A 15 FEET SPACING FOR CHANNEL POSTS. ANY CHANNEL POST SPICE SHALL BE IN ACCORDANCE WITH STANDARD DRAWING TC-3.																																																																																																																																																																																																																
6. POST MOUNTED SIGNS IN RURAL AREAS SHALL BE CONSTRUCTED WITH THE NEAR EDGE OF THE SIGN FROM 6 TO 12 FEET FROM THE PAYMENT EDGE. SIGNS IN URBAN AREAS AND IN HIGHWAY CONSTRUCTION SHALL BE MOUNTED A MINIMUM OF 2 FEET FROM THE PAYMENT EDGE.																																																																																																																																																																																																																
7. ALL POST AND BARRICADE MOUNTED SIGNS MOUNTED IN URBAN AREAS SHALL BE MOUNTED A MINIMUM DISTANCE OF 7' FROM THE BOTTOM OF THE SIGN TO THE ROADWAY SURFACE. ALL POST AND BARRICADE MOUNTED SIGNS MOUNTED IN RURAL AREAS SHALL BE MOUNTED A MINIMUM DISTANCE OF 7' FROM THE BOTTOM OF THE SIGN TO THE ROADWAY SURFACE. EXCEPT A MINIMUM OF 6' SHALL BE USED WHEN MOUNTING AN ADVISORY SIGN BELOW A WARNING SIGN. ADVISORY SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS FOR SHORT-TERM CONSTRUCTION. RETROREFLECTIVE DEVICES SHALL BE USED. TEMPORARY SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS FOR SHORT-TERM, SHORT DURATION, AND MOBILE CONDITIONS. THEY SHALL BE NO LESS THAN ONE FOOT ABOVE THE TRAVELED WAY. LONG-TERM STATIONARY SIGNS SHALL BE DIRECT BURIED IN SOIL, UNLESS CONDITIONS PREVENT THE USE OF SUCH SIGNS, OR AS APPROVED BY THE ENGINEER. CONCRETE PLACEMENT FOR ROAD BUILT, OR OTHER SOLID MATERIALS SHALL NOT BE UTILIZED WITH PORTABLE SIGN SUPPORTS.																																																																																																																																																																																																																
8. FLAGGERS SHALL USE REFLECTORIZED STOP-SLOW PADDLES. FLAGS MAY BE USED ONLY FOR EMERGENCY SITUATIONS.																																																																																																																																																																																																																
9. MOST OF THE SIGNS SHOWN ARE ORIENTED TO THE RIGHT. HOWEVER, THIS DOES NOT PRECLUDE THE USE OF MIRROR IMAGES OF THESE SIGNS WHERE THE REVERSE ORIENTATION MIGHT BETTER CONVEY TO MOTORISTS THE PROPER DIRECTION OF MOVEMENT.																																																																																																																																																																																																																
10. R55-1 SIGNS SHALL BE PLACED AT LEAST 1500' BUT NOT MORE THAN 1 MILE IN ADVANCE OF THE WORK ZONE. SIGNS SHALL BE PLACED AT A MINIMUM OF 500' IN ADVANCE OF THE "REDUCED SPEED AHEAD" SIGN.																																																																																																																																																																																																																
* NOTE: SUPPORTS FOR SIGNS, BARRICADES, AND VERTICAL PANELS THAT ARE DIFFERENT FROM THOSE SHOWN ARE NOT PERMITTED, BUT MUST MEET THE REQUIREMENTS OF NCARP-350 OR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH). MASH WILL BE ACCEPTED, COMPLIANCE WITH THE REQUIREMENTS OF MASH SHALL BE REQUIRED FOR ASSESSING SAFETY HARDWARE. (MASH) IS REQUIRED FOR ALL PROJECTS.																																																																																																																																																																																																																
<table><tr><td>R4-1</td><td>DELETED R24-1 & ADDED R24-5</td></tr><tr><td>R4-2</td><td>DELETED R24-2 & ADDED R24-5</td></tr><tr><td>R4-3</td><td>DELETED R24-3 & ADDED R24-5</td></tr><tr><td>R4-4</td><td>DELETED R24-4 & ADDED R24-5</td></tr><tr><td>R4-5</td><td>DELETED R24-5 & ADDED R24-5</td></tr><tr><td>R4-6</td><td>DELETED R24-6 & ADDED R24-5</td></tr><tr><td>R4-7</td><td>DELETED R24-7 & ADDED R24-5</td></tr><tr><td>R4-8</td><td>DELETED R24-8 & ADDED R24-5</td></tr><tr><td>R4-9</td><td>DELETED R24-9 & ADDED R24-5</td></tr><tr><td>R4-10</td><td>DELETED R24-10 & ADDED R24-5</td></tr><tr><td>R4-11</td><td>DELETED R24-11 & ADDED R24-5</td></tr><tr><td>R4-12</td><td>DELETED R24-12 & ADDED R24-5</td></tr><tr><td>R4-13</td><td>DELETED R24-13 & ADDED R24-5</td></tr><tr><td>R4-14</td><td>DELETED R24-14 & ADDED R24-5</td></tr><tr><td>R4-15</td><td>DELETED R24-15 & ADDED R24-5</td></tr><tr><td>R4-16</td><td>DELETED R24-16 & ADDED R24-5</td></tr><tr><td>R4-17</td><td>DELETED R24-17 & ADDED 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R24-5	R4-24	DELETED R24-24 & ADDED R24-5	R4-25	DELETED R24-25 & ADDED R24-5	R4-26	DELETED R24-26 & ADDED R24-5	R4-27	DELETED R24-27 & ADDED R24-5	R4-28	DELETED R24-28 & ADDED R24-5	R4-29	DELETED R24-29 & ADDED R24-5	R4-30	DELETED R24-30 & ADDED R24-5	R4-31	DELETED R24-31 & ADDED R24-5	R4-32	DELETED R24-32 & ADDED R24-5	R4-33	DELETED R24-33 & ADDED R24-5	R4-34	DELETED R24-34 & ADDED R24-5	R4-35	DELETED R24-35 & ADDED R24-5	R4-36	DELETED R24-36 & ADDED R24-5	R4-37	DELETED R24-37 & ADDED R24-5	R4-38	DELETED R24-38 & ADDED R24-5	R4-39	DELETED R24-39 & ADDED R24-5	R4-40	DELETED R24-40 & ADDED R24-5	R4-41	DELETED R24-41 & ADDED R24-5	R4-42	DELETED R24-42 & ADDED R24-5	R4-43	DELETED R24-43 & ADDED R24-5	R4-44	DELETED R24-44 & ADDED R24-5	R4-45	DELETED R24-45 & ADDED R24-5	R4-46	DELETED R24-46 & ADDED R24-5	R4-47	DELETED R24-47 & ADDED R24-5	R4-48	DELETED R24-48 & ADDED R24-5	R4-49	DELETED R24-49 & ADDED R24-5	R4-50	DELETED R24-50 & ADDED R24-5	R4-51	DELETED R24-51 & ADDED R24-5	R4-52	DELETED R24-52 & ADDED R24-5	R4-53	DELETED R24-53 & ADDED R24-5	R4-54	DELETED R24-54 & ADDED R24-5	R4-55	DELETED R24-55 & ADDED R24-5	R4-56	DELETED R24-56 & ADDED R24-5	R4-57	DELETED R24-57 & ADDED R24-5	R4-58	DELETED R24-58 & ADDED R24-5	R4-59	DELETED R24-59 & ADDED R24-5	R4-60	DELETED R24-60 & ADDED R24-5	R4-61	DELETED R24-61 & ADDED R24-5	R4-62	DELETED R24-62 & ADDED R24-5	R4-63	DELETED R24-63 & ADDED R24-5	R4-64	DELETED R24-64 & ADDED R24-5	R4-65	DELETED R24-65 & ADDED R24-5	R4-66	DELETED R24-66 & ADDED R24-5	R4-67	DELETED R24-67 & ADDED R24-5	R4-68	DELETED R24-68 & ADDED R24-5	R4-69	DELETED R24-69 & ADDED R24-5	R4-70	DELETED R24-70 & ADDED R24-5	R4-71	DELETED R24-71 & ADDED R24-5	R4-72	DELETED R24-72 & ADDED R24-5	R4-73	DELETED R24-73 & ADDED R24-5	R4-74	DELETED R24-74 & ADDED R24-5	R4-75	DELETED R24-75 & ADDED R24-5	R4-76	DELETED R24-76 & ADDED R24-5	R4-77	DELETED R24-77 & ADDED R24-5	R4-78	DELETED R24-78 & ADDED R24-5	R4-79	DELETED R24-79 & ADDED R24-5	R4-80	DELETED R24-80 & ADDED R24-5	R4-81	DELETED R24-81 & ADDED R24-5	R4-82	DELETED R24-82 & ADDED R24-5	R4-83	DELETED R24-83 & ADDED R24-5	R4-84	DELETED R24-84 & ADDED R24-5	R4-85	DELETED R24-85 & ADDED R24-5	R4-86	DELETED R24-86 & ADDED R24-5	R4-87	DELETED R24-87 & ADDED R24-5	R4-88	DELETED R24-88 & ADDED R24-5	R4-89	DELETED R24-89 & ADDED R24-5	R4-90	DELETED R24-90 & ADDED R24-5	R4-91	DELETED R24-91 & ADDED R24-5	R4-92	DELETED R24-92 & ADDED R24-5	R4-93	DELETED R24-93 & ADDED R24-5	R4-94	DELETED R24-94 & ADDED R24-5	R4-95	DELETED R24-95 & ADDED R24-5	R4-96	DELETED R24-96 & ADDED R24-5	R4-97	DELETED R24-97 & ADDED R24-5	R4-98	DELETED R24-98 & ADDED R24-5	R4-99	DELETED R24-99 & ADDED R24-5	R4-100	DELETED R24-100 & ADDED R24-5
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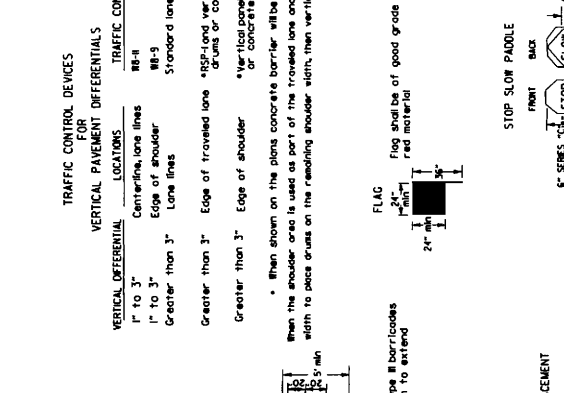
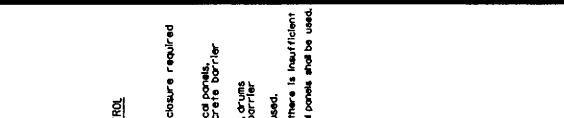
STANDARD	DRAWING	TC-2



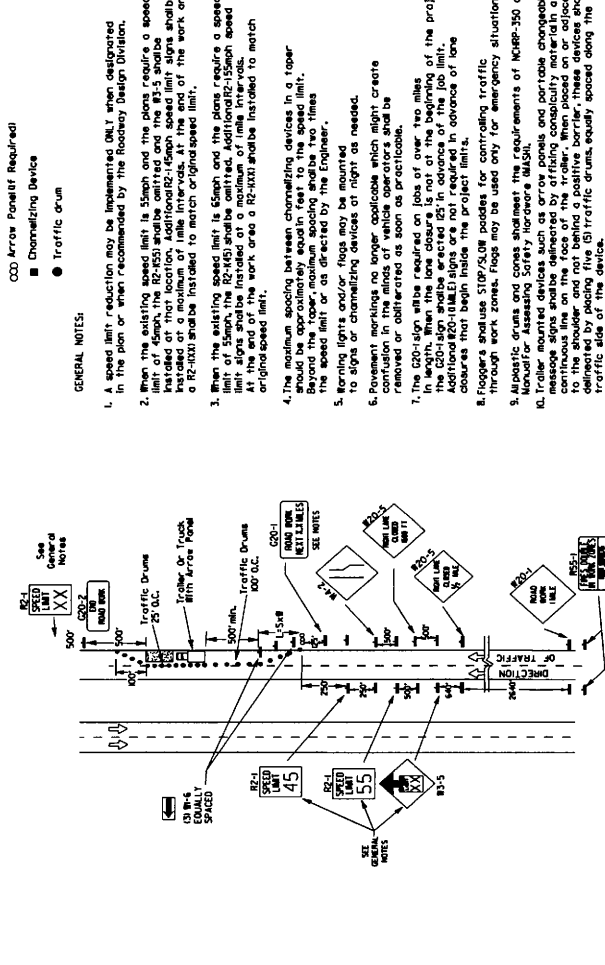
(A) Typical application - daytime maintenance operations of short duration on a 4-lane divided roadway where half of the roadway is closed.



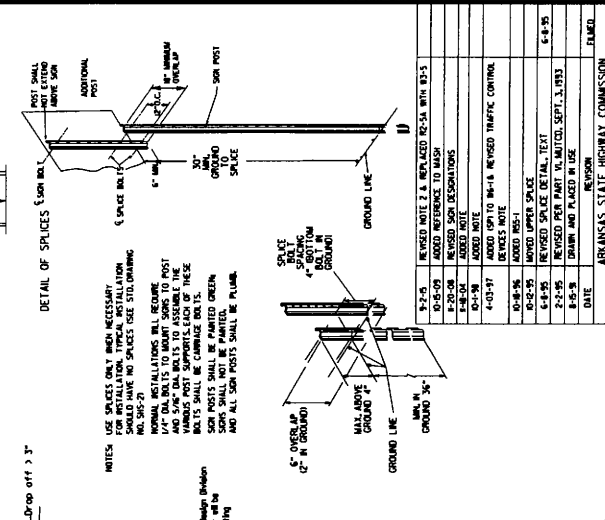
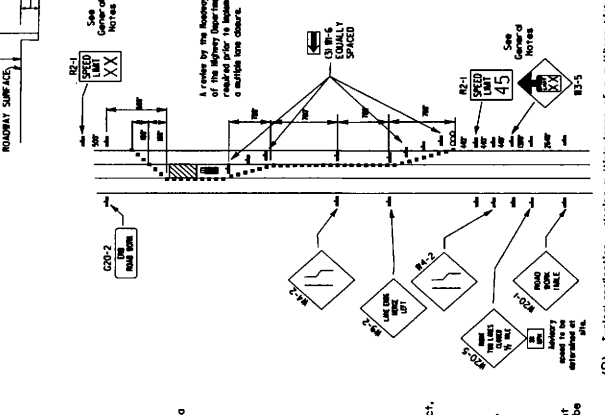
10' center line is closed.

Speed Limit
Or As Noted On Plans

LEGEND - WHITE (REFL)
BACKGROUND - RED (REFL)



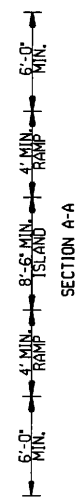
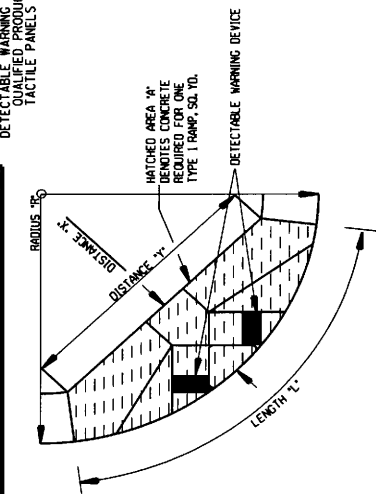
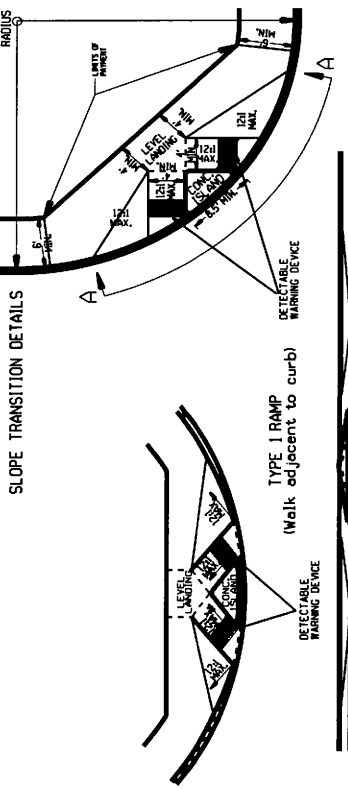
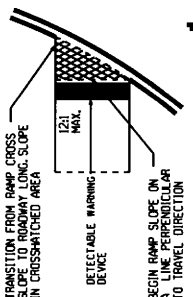
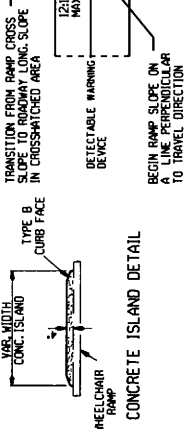
(C) Typical application - construction operations of intermediate to long term duration on a 4-lane divided roadway where half of the roadway is closed.



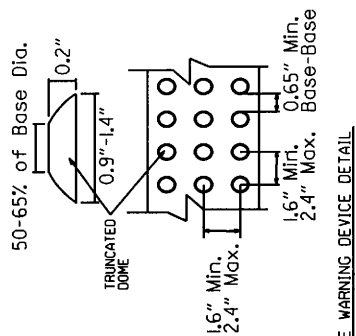
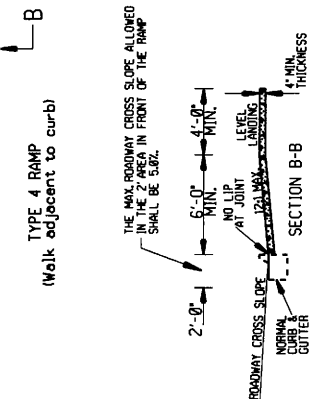
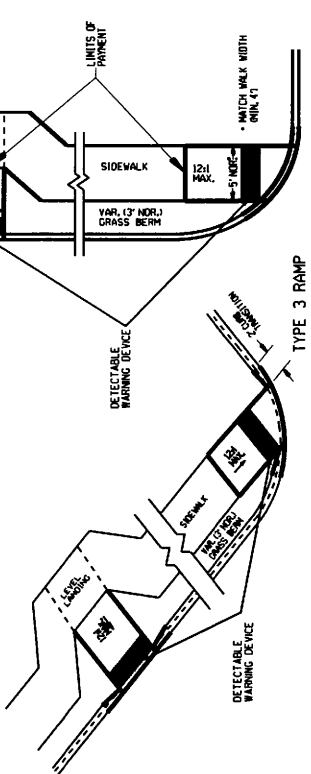
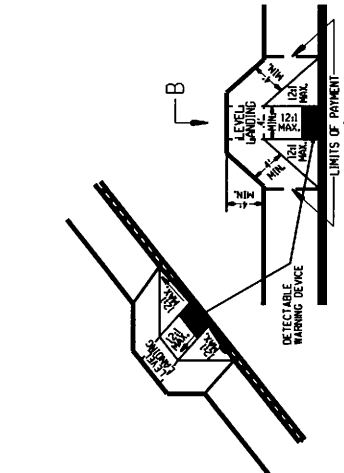
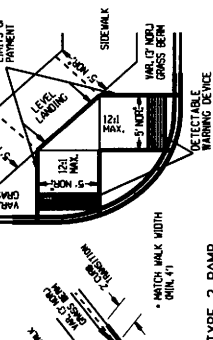
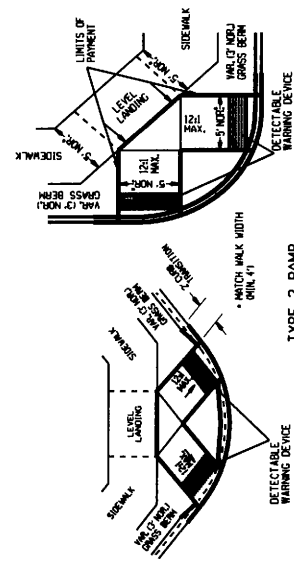
STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

2-2-75	REVISED NOTE 2 & RE-PLACED 2-13-75 WITH 2-15-75	
2-15-75	ADDED REFERENCE TO BASH	
2-15-75	ADDED 2-15-75 REVISIONS	
2-15-75	ADDED NOTE	
2-15-75	ADDED NOTE	
4-13-77	ADDED 1991 TO 1994-15 REVISED TRAFFIC CONTROL DEVICES NOTE	
10-24-76	ADDED 1951-15	
10-24-76	MOVED UPPER SPACE	
6-4-76	REVISED SPACE DETAIL, TEXT	
2-2-76	REVISED PER PART 1A, 10/20/75, SEPT. 1, 1973	
8-25-76	DRAWN AND PLACED IN USE	
DATE	PERSON	REMARKS
		ARKANSAS STATE HIGHWAY COMMISSION

TYPE I RAMP DIMENSIONS AND QUANTITIES					
RAILS	"W"	DISTANCE	"W"	LENGTH	RAMP AREA
"H"	"W"	"H"	"W"	"H"	"H"
15	167	FEET	FEET	FEET	SQ. YD.
15	167	18.52	22.18	28.21	28.21
20	152	22.28	35.46	38.87	35.46
25	124	25.64	38.77	34.80	34.80
30	127	30.26	44.51	35.98	35.98
35	133	33.61	44.51	37.77	37.77
40	146	38.15	47.26	44.91	44.91
45	157	41.69	49.36	47.26	47.26
50	175	46.87	51.31	49.63	49.63
55	124	44.87	51.31	51.80	51.80
60	127	46.33	51.31	51.80	51.80



NOTE: THE CROSS SLOPE OF THE RAMPS, LEVEL LANDINGS, AND SIDEWALKS SHALL NOT EXCEED 2.0% UNLESS REQUIRED TO MATCH STREET LONGITUDINAL GRADE.



DETECTABLE WARNING DEVICE DETAIL

GENERAL NOTES:

1. ALL NEW CONSTRUCTION, UNLESS OTHERWISE INDICATED ON THE PLANS, WHEELCHAIR RAMPS ARE TO BE PROVIDED AT ALL CORNERS OF CURBED STREET INTERSECTIONS AND MID-CROSSWALK LOCATIONS.

2. RAMPS ARE TO BE PROVIDED AT CURBED STREET INTERSECTIONS WITH PEDESTRIAN TRAFFIC AND MID-CROSSWALK LOCATIONS.

3. THE LENGTH OF THE RAMP SHALL BE SUCH THAT THE SLOPE DOES NOT EXCEED 1:21. THE SURFACE TEXTURE OF THE RAMP SHALL CONFORM TO A CLASS 6 FINISH ACCORDING TO SECTION 802.19.

4. THE NORMAL CUTTER GRADE SHALL BE MAINTAINED THROUGH THE AREA OF THE RAMP.

5. ALL PRESENT MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE FEDERAL HIGHWAY ADMINISTRATION (FHWA) MANUAL ON PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION.

6. THE MINIMUM THICKNESS OF THE RAMP WALK & LANDING SHALL BE 4". THE MINIMUM WIDTH OF THE RAMPS SHALL BE THE WALK WIDTH OR 36", WHICHEVER IS GREATER.

7. IT SHALL BE DETERMINED AS NECESSARY TO INSURE THAT THEY ARE PARALLEL TO THE CENTER OF THE CENTER OF ONE RAMP TO THE CENTER OF THE RAMP ON THE OPPOSITE SIDE OF THE INTERSECTION.

8. THE DIMENSIONS AND QUANTITIES SHOWN ON THIS DRAWING ARE FOR A 90° INTERSECTION ONLY. DIMENSIONS AND QUANTITIES FOR SKEWED INTERSECTIONS WILL VARY, AND ARE TO BE DETERMINED BY THE ENGINEER.

RAMP SELECTION CRITERIA

		CORNER LOCATIONS WITH THE RAMP ADJACENT TO THE CURB BOTH NEW CONSTRUCTION AND ALTERATIONS.
FIRST CHOICE	TYPE 1	CORNER LOCATIONS WITH THE WALK OFF SET FROM THE CURB A DISTANCE INSUFFICIENT TO ALLOW THE REQUIRED RAMP SLOPE BOTH NEW CONSTRUCTION AND ALTERATIONS.
	TYPE 2	TO ALLOW THE REQUIRED RAMP SLOPE BOTH NEW CONSTRUCTION AND ALTERATIONS.
	TYPE 3	CORNER LOCATIONS WITH THE WALK OFF SET FROM THE CURB A DISTANCE SUFFICIENT TO ALLOW THE REQUIRED RAMP SLOPE BOTH NEW CONSTRUCTION AND ALTERATIONS.
	TYPE 4	TANGENT LOCATIONS BOTH NEW CONSTRUCTION AND ALTERATIONS.
SECOND CHOICE	TYPE 5	TANGENT LOCATIONS ON TERRACES ONLY.
THIRD CHOICE	TYPE 6	CORNER LOCATIONS ON TERRACES ONLY. THIS RAMP MAY BE USED ONLY IF THE TYPE 5 BARS CANNOT BE PLACED AT THE ENDS OF THE BARISLS.
FOURTH CHOICE	TYPE 7	IF SITE CONSTRAINTS PREVENT THE CONSTRUCTION OF ANY OF THE TYPES LISTED THEN AND ONLY THEN CAN THE 12% MAX SLOPE ON THE RAMP BE EXCEEDED TO PROVIDE A MINIMUM 8' WALK OFF SET FOR A MAXIMUM SLOPE LENGTH OF 5' 0" OR 6% MAX. THE SLOPE CAN BE STEEPER THAN 12% FOR A MAXIMUM SLOPE LENGTH OF 5' 0" OR 6% MAX. FOR A MAX LENGTH OF 2'-2" SLOPES STEEPER THAN 8% ARE NOT ALLOWED UNDER ANY CIRCUMSTANCES.

NOTE: IN ALTERNATIONS, THE SELECTION OF THE TYPE OF WHEELCHAIR RAMP TO BE CONSTRUCTED SHALL BE BASED ON THE AMOUNT OF RIGHT-OF-WAY AVAILABLE, AND ON THE PRESENCE OF OTHER SITE CONSTRAINTS (UTILITIES, BUILDINGS, ETC.). THE PREFERENCE OF OTHER SITE CONSTRAINTS (UTILITIES, BUILDINGS, ETC.) TO THE TABLE ABOVE SHALL BE THE ORDER IN WHICH THE RAMP ARE TO BE CONSIDERED. AN ALTERNATION IS DEFINED AS A PROPOSAL THAT REQUESTS THE USE OF A RAMP TYPE NOT LISTED IN THE TABLE ABOVE. SUCH ALTERNATIONS WILL REQUIRE THE PURCHASE OF ADDITIONAL RIGHT-OF-WAY. ALL PROJECTS THAT REQUIRE THE PURCHASE OF ADDITIONAL RIGHT-OF-WAY WILL USUALLY BE CONSIDERED NEW CONSTRUCTION FOR THE PURPOSES OF THE CHART ABOVE.

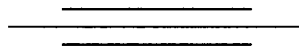
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ARKANSAS STATE HIGHWAY COMMISSION



STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION

EDITION OF 2014



PROPOSAL DOCUMENTS AND SCHEDULE OF ITEMS

ARKANSAS STATE HIGHWAY COMMISSION

PROPOSAL DOCUMENTS

PROPOSAL FOR CONSTRUCTING:

THE PURPOSE OF THIS PROJECT IS TO OVERLAY APPROXIMATELY 1.71 MILES OF CITY STREETS IN THE CITY OF HOLLY GROVE IN MONROE COUNTY. THIS PROJECT CONSISTS OF REMOVAL AND DISPOSAL ITEMS, ACHM SURFACE COURSE, ACHM PATCHING OF EXISTING ROADWAY, R.C. PIPE CULVERTS, MAINTENANCE OF TRAFFIC, WHEELCHAIR RAMPS, AND MISC. ITEMS.

City Street VARIOUS in **MONROE** County, Arkansas, in accordance with Standard Specifications for Highway Construction, Edition of 2014; the Supplemental Specifications and Special Provisions attached hereto; and the Construction Plans on file in the Office of the State Highway Commission, designated as

Job **C48002** **STATE AID CITY JOB (CODE 9971)**

Job Name: **HOLLY GROVE OVERLAY (SEL. SECS.) (S)**

said project being approximately **1.71 miles in length**.

Proposal received until 10:00 a.m. on April 10, 2019

TO THE ARKANSAS STATE HIGHWAY COMMISSION:

Gentlemen: By submission of your bid, you agree to the following:

It is hereby certified that a careful examination has been made of the Plans, Specifications, Supplemental Specifications, Special Provisions, and Form of Contract and the site of the work throughout its whole extent. On the basis of the Plans, Specifications, Supplemental Specifications, Special Provisions, and Form of Contract, the bidder proposes to furnish all necessary machinery, equipment, tools, labor and other means of construction, and to furnish all materials as specified, in the manner and at the time prescribed, and to finish the entire project within the time hereinafter proposed. The bidder understands that the quantities of work mentioned herein are approximate only, and are subject to increase or decrease, and hereby proposes to perform all quantities of work, whether increased or decreased, in accordance with the provisions of the Specifications, and at the unit prices bid in the attached Schedule of Items.

Receipt is hereby specifically acknowledged, and complete examination expressly guaranteed of the following:

1. Standard Specifications for Highway Construction, Edition of 2014.
2. Supplemental Specifications.
3. Special Provisions.
4. Proposal Documents.
5. Schedule of Items.
6. Construction Plans.

The bidder further proposes to perform all Extra Work that may be required, on the basis provided in the Specifications, and to give such work personal attention, and to secure economical performance.

The bidder further proposes to execute the contract agreement, and to furnish satisfactory bonds within ten days after he has received notice that he has been awarded the contract. The bidder further agrees to begin work when ordered by the Engineer, or within ten days thereafter, and to complete the work **within twenty (20) working days**.

PROPOSAL DOCUMENTS

(Continued)

The bidder also proposes to furnish a surety Performance bond or bonds in a sum equal to the full amount of the contract and a surety Payment bond or bonds in a sum equal to 80% of the full amount of the contract. These bonds shall not only serve to guarantee the completion of the work and payment of all bills and claims by the bidder, but also to guarantee the excellence of both workmanship and material until the work is finally accepted and the provisions of the Plans, Specifications and Special Provisions fulfilled.

The bidder shall furnish a Proposal Guaranty in the form specified in Subsection 102.09 of the Specifications, in the amount of five percent (5%) of the total amount bid, which is submitted as a guarantee of the good faith of the proposal, and that the Bidder will enter into written contract, as provided, to do the work should the award be made to him; and it is hereby agreed that if, at any time other than as provided in Subsection 102.11 of the Standard Specifications, Withdrawal/Modification of Proposals, the bidder should withdraw his proposal, or should fail to execute the contract and furnish satisfactory bonds as herein provided, if his proposal is accepted, the Arkansas State Highway Commission, in either of such events, shall be entitled and is hereby given the right to retain the Proposal Guaranty, not as a penalty, but as liquidated damages, it being understood and agreed by the bidder that the amount of the Proposal Guaranty is a reasonable sum to be fixed as liquidated damages considering the damages the Arkansas State Highway Commission will sustain in the event of the bidder's withdrawal of his proposal, or failure to execute the contract and furnish satisfactory bonds if his proposal is accepted, and said amount is herein agreed upon and fixed as liquidated damages because of the difficulty of ascertaining the exact amount of damage that may be sustained by reason of the above set out circumstances.

Arkansas Department of Transportation
Schedule of Items

State Job No.: C48002

Date Estimated: 2/7/2019

Job Name: HOLLY GROVE OVERLAY (SEL. SECS.) (S)

Date Revised:

Federal Aid Project: 9971

Line Number	Item Code and Description	Estimated Quantity	Unit Bid Price	Price Extension
Section 01 - PROPOSAL ITEMS				
0001	202 - REMOVAL AND DISPOSAL OF WALKS	11.000 SQYD		
0002	SS&401 - TACK COAT	1,866.000 GAL		
0003	SPSS407 - MINERAL AGGREGATE IN ACHM SURFACE COURSE (3/8")	2,035.000 TON		
0004	SPSS407 - ASPHALT BINDER (PG 64-22) IN ACHM SURFACE COURSE (3/8") (MINIMUM BID \$120.00)	118.000 TON		
0005	SPSS415 - ACHM PATCHING OF EXISTING ROADWAY	75.000 TON		
0006	603 - MAINTENANCE OF TRAFFIC	1.000 L.S.		
0007	SS&604 - SIGNS	360.000 SQFT		
0008	SPSS606 - 18" SIDE DRAIN	16.000 LF		
0009	641 - WHEELCHAIR RAMPS (TYPE 3)	20.000 SQYD		
Section 01 Total:				
Subtotal:				
0010	601 - MOBILIZATION (UNIT BID AMOUNT MAY NOT EXCEED 5% OF SUBTOTAL)	1.000 L.S.		
Bid Total:				

ARKANSAS DEPARTMENT OF TRANSPORTATION
SUPPLEMENT TO PROPOSAL
ANTI-COLLUSION AND DEBARMENT CERTIFICATION

**FAILURE TO EXECUTE AND SUBMIT THIS CERTIFICATION SHALL RENDER THIS
BID NONRESPONSIVE AND NOT ELIGIBLE FOR AWARD CONSIDERATION.**

As a condition precedent to the acceptance of the bidding document for this project, the bidder shall file this Affidavit executed by, or on behalf of the person, firm, association, or corporation submitting the bid. The original of this Affidavit shall be filed with the Arkansas Department of Transportation **at the time proposals are submitted.**

A F F I D A V I T

I hereby certify, under penalty of perjury under the laws of the United States and/or the State of Arkansas, that the bidder listed below has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with the submitted bid for this project, is not presently barred from bidding in any other jurisdiction as a result of any collusion or any other action in restraint of free competition, and that the foregoing is true and correct.

Further, that except as noted below, the bidder, or any person associated therewith in the capacity of owner, partner, director, officer, principal investigator, project director, manager, auditor, or any position involving the administration of Federal funds:

- a. is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any Federal, State, or Local agency;
- b. has not been suspended, debarred, voluntarily excluded or determined ineligible by any Federal, State, or Local agency within the past 3 years;
- c. does not have a proposed debarment pending; and
- d. has not been indicted, convicted, or had an adverse civil judgment rendered by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past 3 years.

(Notary Public)

2/28/18

ARKANSAS DEPARTMENT OF TRANSPORTATION
SUPPLEMENT TO PROPOSAL
RESTRICTION OF BOYCOTT OF ISRAEL CERTIFICATION

Pursuant to Arkansas Code Annotated § 25-1-503, a public entity **shall not** enter into a contract valued at \$1,000 or greater with a company unless the contract includes a written certification that the person or company is not currently engaged in, and agrees for the duration of the contract not to engage in, a boycott of Israel.

By signing below, the Contractor agrees and certifies that they do not boycott Israel and will not boycott Israel during the remaining aggregate term of the contract.

If a company does boycott Israel, see Arkansas Code Annotated § 25-1-503.

Bid Number/Contract Number	
Description of product or service	
Contractor name	

Contractor Signature: _____

Date: _____